

MAR 12 1917
UNIV. OF MICH.
LIBRARY

The Classical Journal

PUBLISHED BY THE CLASSICAL ASSOCIATION OF THE MIDDLE WEST AND SOUTH
WITH THE CO-OPERATION OF THE CLASSICAL ASSOCIATION OF NEW ENGLAND
AND THE CLASSICAL ASSOCIATION OF THE PACIFIC STATES

Volume XII

DECEMBER 1916

Number 3

Editorial	161
Hesiodic Reminiscences in the "Ascræan" of Kostas Palamas	
Aristides Evangelos Phourides	164
The Decline of Roman Tragedy	
Tenny Frank	176
A Greek Conception of the Constitution of Matter	
Joseph H. Pike	188
Archæology in 1915	
George H. Chase	200
The Direct Method in Teaching Latin—Some Objections	
M. J. Russell	209
Grammar Up to Date	
Olive M. Sutherland	212
Current Events	
News from the Schools and Colleges	216
General Comment	220
Recent Books	224

THE UNIVERSITY OF CHICAGO PRESS
CHICAGO, ILLINOIS, U.S.A.

AGENTS

THE CAMBRIDGE UNIVERSITY PRESS, LONDON AND LEVERHULME

KARL W. HIRSELMANN, LEIPZIG

THE MARUZEN-KABUSHIKI-KAISHA, TOKYO, OSAKA, KYOTO,
FUKUOKA, SENDAI

THE MISSION BOOK COMPANY, SHANGHAI

THE CLASSICAL JOURNAL

Published by the Classical Association of the Middle West and South, with the co-operation of the Classical Association of New England, and the Classical Association of the Pacific States

Managing Editors

FRANK J. MILLER

University of Chicago

ARTHUR T. WALKER

University of Kansas

For New England

MONROE N. WETMORE

Williams College

For the Pacific States

HERBERT C. NUTTING

University of California

Associate Editors

GEORGE H. CHASE

Harvard University

DANIEL W. LOTHMAN

East High School, Cleveland

GILBERT C. SCOGGIN

University of Missouri

FREDERICK C. EASTMAN

University of Iowa

WALTER MILLER

University of Missouri

JULIANNE A. ROLLER

Franklin High School, Portland, Oregon

CLARENCE W. GLEASON

Roxbury Latin School, Boston

JOHN A. SCOTT

Northwestern University

BERTHA GREEN

Hollywood High School, Los Angeles

The *Classical Journal* is published monthly except in July, August, and September. The subscription price is \$2.50 per year; the price of single copies is 30 cents. Orders for service of less than a half-year will be charged at the single-copy rate. Postage is prepaid by the publishers on all orders from the United States, Mexico, Cuba, Porto Rico, Panama Canal Zone, Republic of Panama, Hawaiian Islands, Philippine Islands, Guam, Samoan Islands, Shanghai. Postage is charged extra as follows: For Canada, 15 cents on annual subscriptions (total \$2.65); on single copies, 2 cents (total 32 cents). For all other countries in the Postal Union, 24 cents on annual subscriptions (total \$2.74); on single copies, 3 cents (total, 33 cents). Patrons are requested to make all remittances payable to The University of Chicago Press in postal or express money orders or bank drafts.

The following agents have been appointed and are authorized to quote the prices indicated:

For the British Empire: THE CAMBRIDGE UNIVERSITY PRESS, Fetter Lane, London, E.C. Yearly subscriptions including postage, 11s. 3d. each; single copies, including postage, 1s. 4d. each.

For the Continent of Europe: KARL W. HIERSEMANN, Königstrasse 29, Leipzig, Germany. Yearly subscriptions, including postage, M. 13.70 each; single copies, including postage, M. 1.65 each.

For Japan and Korea: THE MARUZEN-KABUSHIKI-KAISHA, 11 to 16 Nihonbashi Tori San-chome, Tokyo, Japan. Yearly subscriptions, including postage, Yen 5.50 each; single copies, including postage, Yen 0.66 each.

For China: THE MISSION BOOK COMPANY, 13 Peking Road, Shanghai. Yearly subscriptions, \$2.50; single copies, 30 cents, or their equivalents in Chinese money. Postage extra, if mailed direct outside of Shanghai, on yearly subscriptions 24 cents, on single copies 3 cents.

Claims for missing numbers should be made within the month following the regular month of publication. The publishers expect to supply missing numbers free only when they have been lost in transit.

Business correspondence should be addressed as follows:

1. Concerning membership in the Classical Association of the Middle West and South to LOUIS E. LORD, Oberlin College, Oberlin, Ohio. The territory of the Association includes Alabama, Arkansas, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, Wyoming. The membership fee is \$2.00 per year to residents of this territory.

2. Concerning membership in the Classical Association of New England to GEORGE E. HOWES, Williams College, Williamstown, Mass. The membership fee is \$2.00 per year to residents of this territory.

3. Concerning membership in the Classical Association of the Pacific States to M. E. DEUTSCH, University of California, Berkeley, Cal. The territory of this association includes California, Oregon, Washington, Idaho, Montana, Nevada, and Arizona. The membership fee is \$2.00 per year to residents of this territory.

4. Concerning subscriptions (not related to membership) to THE UNIVERSITY OF CHICAGO PRESS, Chicago, Ill.

Communications for the editors and manuscripts should be sent either to FRANK J. MILLER, University of Chicago, Chicago, Ill., or to ARTHUR T. WALKER, University of Kansas, Lawrence, Kan.; from New England contributors, to MONROE N. WETMORE, Williams College, Williamstown, Mass., and from the Pacific States to HERBERT C. NUTTING, University of California, Berkeley, Cal.

Fifty reprints of articles will be furnished *gratis* to authors. Additional copies, if ordered in advance of publication, will be supplied at cost.

THE CLASSICAL JOURNAL

VOLUME XII

DECEMBER 1916

NUMBER 3

Editorial

THE CLASSICAL ASSOCIATION OF THE PACIFIC STATES

The field of this new classical association includes seven states, namely, Arizona, California, Idaho, Montana, Nevada, Oregon, and Washington. It is divided into three sections: Northern, Central, and Southern.

The territory is vast, distances are great, and the classical teachers are much scattered. It has been arranged, therefore, that the sections in turn shall have the annual meeting, and that the officers of the association shall be chosen with a view to this rotation. To bind the whole together more effectively, the traveling expenses of the secretary-treasurer to all meetings will be defrayed by the association.

At the organization meeting at Berkeley in July of this year two sessions were held, with about a hundred persons in attendance, and with representation all along the Coast, from Seattle to San Diego. The next annual meeting is assigned to the Northern Section and will be held at Portland. The officers for the year 1916-17 are as follows: President, Professor Kelley Rees, Reed College; Vice-Presidents, Professor F. C. Taylor, Pacific University; Professor B. O. Foster, Leland Stanford Junior University; Dr. W. A. Edwards, Los Angeles Junior College; Secretary-Treasurer, Professor M. E. Deutsch, University of California; Members of Executive Committee, Dr. Andrew Oliver, Broadway High School, Seattle; Professor J. T. Allen, University of California; Miss Elizabeth Freese, San Diego Junior College; the Managing Editor of the *Classical Journal*.

In conformity with the action of the Association of the Middle West and South, the business year of the association has been made to end on August 31.

Acting on a suggestion received through Professor Lord, the following committee is appointed to consider possible improvement in second-year Latin programs: Professor J. Elmore, Leland Stanford Junior University; Dr. A. P. McKinlay, Lincoln High School, Portland; and Miss Bertha Green, Hollywood High School, Los Angeles.

In the formation of this new classical association, one of the chief objects was to bring to the hands of teachers an official organ devoted to the interests of Latin and Greek in the schools. In this respect the Northern Section was already on a fair footing; but in California and some of the other states a beginning had scarcely been made. Much yet remains to be done; but it is distinctly gratifying that, though the association is only a few months old, the state of California alone has already a paid-up membership of one hundred and forty.

H. C. N.

ON TO LOUISVILLE

At the session of the Executive Committee of our Association during its annual meeting in Chicago last April, Miss Olive B. Catlin appeared as the accredited representative of the city of Louisville, bringing a most cordial invitation to the Classical Association of the Middle West and South to hold its next meeting (April, 1917) in that city. Miss Catlin brought letters from the presidents of the Southern Baptist Theological Seminary, of the State University of Kentucky, of the Presbyterian Theological Seminary of Kentucky, and of the University of Kentucky, all of which assure us of the warm hospitality of Kentucky's institutions of learning.

But not only do our brethren of the "gown" offer us a royal welcome, but the "town" also joins most heartily in this. That our readers may realize the full force of this and make early resolve to accept this wholehearted hospitality, we give below some of the

letter from official and commercial Louisville—a side of city life which is not always even conscious of our classical comings and goings in its midst. Here is the letter from Mayor John H. Buschmeyer:

On behalf of the citizens of Louisville I extend to you a most hearty invitation to hold your meeting in this, the gateway city of the South, in 1917.

Louisville is an ideal city in which to hold a convention. Nowhere will you find better facilities, nowhere a more hospitable and social people. Whatever may lie in our power to make your stay in Louisville pleasant and enjoyable will be done, and I can assure you that in no city in the Union can you possibly find a more cordial welcome than you will receive in Louisville.

Mr. R. W. Brown, managing director of the Louisville Convention and Publicity League, writes as follows:

Through the kindness of Miss Olive B. Catlin it becomes the genuine pleasure of the Louisville Convention and Publicity League to extend a most cordial invitation to hold your next convention in Louisville. Our invitation represents the unanimous desire of all our people, who fortunately know something of your organization, its splendid achievements, and the still bigger and better things it hopes to accomplish in the years to come. Our guaranty is given that every provision will be made to obtain a suitable place or places of meeting and to provide all other substantial facilities to insure the business success of the gathering. In addition, between sessions, our program will include a series of courtesies commensurate with our regard for your high calling.

Through Governor Stanley, ably seconded by President Barker of the State University, all of Kentucky is uniting with us in this invitation. Our local universities and other educational activities also express their earnest desire, as witnessed by the inclosures.

Louisville will be the third city of the South to entertain our Association at its annual meeting. Let as many of our members as possible resolve and prepare early to go, that they may assist in making this the best of our accumulating annuals, both academically and socially. In order to give fuller opportunity for this social side, the Association at its last meeting voted to prolong the time of meeting by an extra half-day.

HESIODIC REMINISCENCES IN THE "ASCRAEAN" OF KOSTES PALAMAS¹

BY ARISTIDES EVANGELUS PHOUTRIDES
Harvard University

The "Ascraean" of Kostas Palamas² constitutes the first part of the "Great Visions," which appeared in 1904 in the volume entitled *Life Immovable*.³ The poem, consisting of six hundred and fifty-six verses, is most expressive of the thought and art of Palamas, and forms a magnificent prelude to his great master piece, "The Twelve Words of the Gypsy."⁴ The speaker of the poem is the Ascraean Hesiod, who, returning "from the endless journey, from the lands one only enters but can never leave" meets the poet of modern Greece in the sunlight of the upper world. He calls on the "old Life-Song" to be his guide again, and reveals his identity with a contrast of himself with Homer:

The blind Olympian bard, the child divine
Of Meles, sings in tranquil strains of men
Of heroes and of Gods; but from a fountain
Restless, my song, thou flowest restlessly;
The flaming lava and the surging sea
Thou art!

Hark! Ascra's bard am I! No master
Of golden dreams of calm, or radiant songs,

¹ Read before the Eleventh Annual Meeting of the Classical Association of New England, 1916.

² Palamas is undoubtedly the greatest poet of modern Greece. Born in Missolonghi fifty-six years ago, he was educated in Athens, where he lives now holding the position of secretary at the university. One of the foremost leaders in the long struggle for the vernacular, he is certainly the greatest literary genius of the modern language, and has been called by a French critic, Eugène Clement, "the greatest poet of Europe today." A more general article on the man and his work is to appear soon in *Poet Lore*.

³ The Greek titles are 'Ασκραῖος, 'Απὸ τὰ Μεγὰλα 'Οράματα, 'Η 'Ασάλευτη Ζωή.

⁴ 'Ο Δωδεκάλογος τοῦ Γύφτου.

No! The black Earth I tread drags me with power
 Magnetic; my spirit travels on the wings
 Of sighs. Ye hills, I am the faithful friend
 Of the gentle ewe; a tiller of the field,
 I furrow, sow, and sweat. . . .
 My song is loneliness; my joy, the plough;
 The waves of wheatfields mingle with my rhythms

Then in words that give the substance of a Hesiodic passage of the *Works and Days*¹ expressed in strains of a deeper lyricism, he speaks of his origin:

On my primeval land the jackals howled,
 The jackals of the wilderness, amidst
 My fathers' graceless lives; and graceless were
 The soft-blown coastlands of Aeolia.
 On open seas sailors of Cyme drove us;
 On ports unknown sailors of Cyme cast us:
 Here the cicada sang; the hawthorn bloomed;
 And rest thou soughtest, O storm-beaten orphan,
 In laughless summers and in winters fierce.
 At the sacred Mountain's root thou layest darkling,
 Ascra; from thee, I took this graceless voice
 And harsh. The breasts of Helicon's Fair Sisters
 Nourished me not, but need and bitter care.

Then follows a passage inspired by the opening verses of the *Theogony*. In the old poem, the Muses appear before the shepherd-bard at night, ἐννύχαιαι.² In the "Ascraean," the divine visitation takes place in full daylight, but a nightly gloom is suggested by exterior loneliness and internal brooding:

But in the desert dale and secret, once
 In daylight, as the black dreams browsed within me
 And the white sheep about me pastured, lo,

¹ Vss. 633-40:

ὥσπερ ἐμὸς τε πατήρ καὶ σὸς, μέγα νήπιε Πέρση,
 πλωΐζεσκέ' ἐν νηυσὶ βίου κεχρημένοι ἐσθλοῦ.
 ὅς ποτε καὶ τῇδ' ἦλθε πολλὸν διὰ πόντον ἀνύσσας,
 Κύμην Αἰολίδα προλιπὼν, ἐν νηὶ μελαίνῃ.
 οὐκ ἄφενος φεύγων οὐδέ πλοῦτόν τε καὶ δλβον,
 ἀλλὰ κακὴν πενίην, τὴν Ζεὺς ἀνδρεσσὶ δίδωσι.
 νάσσατο δ' ἄγχι' Ἑλικῶνος δίζυρῃ ἐνὶ κώμῃ,
 Ἄσκραν, χεῖμα κακῇ, θέρει ἀργαλέῃ, οὐδέ ποτ' ἐσθλῇ

² *Theog.* v. 10.

Before me stood the offspring of a world
Thrice-deep, thrice-marvelous, nine goddesses,
The sisters dwelling upon Helicon!

In the *Theogony*, the Muses "dwelling on the great and holy mountain of Helicon, dance with delicate feet about the violet colored spring . . . and bathe their tender bodies in the streams of Termessos, or of Hippocrene, or of sacred Holmeius."¹ These streams have given the modern poet the source of his great vision. Light and water are elements in which he likes to revel, a tendency that should appear very natural to all of us who have visited the light-flooded and sea-embraced country of Greece:

Waters about and waters everywhere:
Rivers and cataracts and lakes and fountains,
Ravines and springs and gentle rivulets;
All-tranquil singers, criers thunder-voiced,
Waters that slumber wakelessly and other
Swift-flowing waters loud and reveling.
And from the water-glad green crypts and vaults
Where rocks are spanned into virgin crystal gates,
From openings into thrice-deep first-seen sights,
The Water Sprites! with minds and bodies moulded
Of cool and sunlit waters undivided;
And waters were the streaming symphonies
Of voices manifold that flowed from them. . . .
From them I took the laurel bough I hold,
And from their hands I ate the laurel fruit,
And knew the deeds of mortals and of gods,
And I beheld like now and yesterday
The seasons of tomorrow. Since that day,
I am the bard, the wizard, and the prophet.
A lightning quiverless, my lyre's faint glimmers

¹ *Op. cit.*, vss. 1 ff.:

Μουσάων Ἑλικωνιάδων ἀρχώμεθ' αἰδεῖν,
αἰθ' Ἑλικῶνος ἔχουσιν δρος μέγα τε ζάθεόν τε,
καί τε περί κρήνην ἰοιδέα πόντος ἀπαλοῖσιν
ὀρχεῦνται καὶ βωμὸν ἔρισθεντός Κρονίωνος·
καί τε λουσάμεναι τέρενα χρῶα Τερμησσοῖο,
ἢ Ἴππου Κρήνης, ἢ Ὀλμειοῦ ζαθέοιο,
ἀκροτάτῳ Ἑλικῶνι χοροῦς ἐνεποιήσαντο
καλοῦς, ἱμερόεντας· ἐπερρώσαντο δὲ ποσσίν.
ἔνθεν ἀπορνύμεναι, κεκαλυμμέναι ἤερι πολλῇ,
ἐννύχιαί στείχον περικαλλέα δασαν ἰεῖσαι.

Flash forth. I am the wanderer who wanders
Forward; the laurel eater who is filled
With hunger bitter, and unquenchable¹

After this introduction, the main part of the poem begins. Hesiod, measuring once more his past life with his awakening memory, begins his great song in a background that transfers us into the light-sea of a Grecian summer and its seething life. "This," he sings, is the hour to begin; for

Lo, from its husk, full-ripe the corn-ear bursts;
There, the grape-cluster blushes red; the fig-tree
Spreads its green mantle to the top; the northwind
Ceases; the grain-ear is bending to the earth;
The lip, to the lover's kiss; and thou, O smoke,
Snake-like thou glidest to the boundless sky.
Amid the oak leaves, blithe the cuckoo sings,
And like the silence, its voice lingers on;
And nothing ends and nothing fades away²

Then he recalls the five ages of man through which he has lived. The ancient poet of the *Works and Days*³ introduces the legend of the Five Ages in order to illustrate his pessimistic view that man's life was happier in the remotest past and that with time crime and woe have been winning the ascendancy, the change culminating in the present age, the unhappiest of all. With the candor and charm of a child, he speaks of the various ages drifting

¹ Cf. *Theog.* vss. 22-32:

αἶ νύ ποθ' Ἡσίοδον καλὴν ἐδίδαξαν ἀοιδὴν
ἄρνας ποιμαίνονθ' Ἑλικῶνος ὑπο ζαθέοιο.
τόνδε δέ με πρῶτιστα θεὰ πρὸς μῦθον ἔειπον;
ποιμένες ἀγραυλοὶ,
ἴδμεν ψεύδεα πολλὰ λέγειν ἐτύμοισιν ὁμοῖα,
ἴδμεν δ', εἴτ' ἐθέλωμεν, ἀληθέα μυθήσασθαι.
ὥς ἔφασαν κοῦραι μέγ' αὖτις Διὸς ἀρτίπειραι·
καὶ μοι σκῆπτρον ἔδον δάφνης ἐριθηλέος ὄζον
δρέψασθαι θηγόν· ἐνέπνευσαν δέ μοι αὐδὴν
θεῖην, ὥς κλείοιμι τὰ τ' ἐσόμενα πρὸ τ' ἐόντα. . . .

² This passage suggests the two verses from the "Shield of Hercules" (398-99) indicating the time of the battle between Cycnus and Hercules:

τῆμος δὲ κέγχροισι πέρι γλῶχες τελέθουσι,
τούς τε θέρει σπείρουσιν, ὅτ' ὁμφακας αἰόλλονται
τὴν ὥρην μάραντο

³ Vss. 109, 127, 143, 156, 174, 202.

farther and farther away from joy and peace, the ages which except for the last one have no relation whatever with his own life. He asks us to look on them objectively and accept them as a true report of by-gone times in which we have had no share. Not so with Palamas. With the modern poet of Greece, unity is won through subjectivity. The five ages are not detached from our own lives and fixed in the remote past, but they are man's own—at least, the poet's own—experience. The Golden Age and the Silver Age, the age of bronze and the age of heroic deeds, are just as real parts of our lives as the gloomy age of iron.

Happiness seems to be ascribed to the early period of childhood. With a sentiment not unlike that of Wordsworth in his "Ode on Intimations of Immortality from Recollections of Early Childhood," the Ascræan addresses his soul, to which "all paths, all seas, all storms are open":¹

O Soul within me, ever wandering,
The gold-wrought world before thee rose and cut
Thy passage like a tranquil lake; and I
Knew the gold-dwellers and to the godlike came,
Whom the Immortals made with joy, just as
The mighty maker, untouched by passions, makes
Even Immortals—*dreams of a white rock,*
The breathings of his might, and images
Of his own soul. . . .

Tranquilly they were born,
Tranquilly blossomed, withered tranquilly.
The fathers reigned, the righteous ruled; there was
No longing, wrath, nor hatred. Earth, their slave,
Bestowed her treasures on them steadily;
There was no stooping, digging, nor pursuing;
And golden flowers grew straight upon their foot-prints;
And where they turned, they reaped a golden fruit.
Abundance was their lot; and what they lacked
Was pain, old age, and weariness, and crime. . . .
But on I wandered from the golden land,
Like a bird that flashes tremulously by
Cutting with a darkling line the azure world,
And even in a gold-wrought world can find
No friendly roof to rest its battered wing . . .

¹ Cf. Hes. *Works and Days*, vss. 109-27.

The "Age of Silver" follows, a period when man seems still a child and yet is not, and when the awakening of self-consciousness generates ruthless rebellion toward everything about us without giving us the knowledge to build. It is the age in which, dissatisfied with everything about us, past or present, we look upon our former castles as ruined temples of a weary faith, and yet we neither can nor will take thought of the future. Thus the passing away of an innocent happiness that results from the crushing of old ideals is followed by a mood of blind isolation. A rebel defiance is born in us and grows mysteriously in the dim light of vague, unguided thought. It is a sort of Byronic aloofness and discontentment toward all things:

The world of Silver,
Where snow-clad forests spread
Beaten by merciless and glaring moonlight
That weaves its crowns of pearl
To crown the heads of mortals wrapped in gloom,
Drunk with poppy-seed,
Men whom a dimness born of mystery
Binds with life counterfeit,
A life that drags itself upon the face
Of a deep-yawning cliff.
The shroud of the silver glow reflected wraps
All things from mind to grass,
A light that struggles to become a day
And ever stays at dawn

The poet attempts in vain to raise their ruined altars:

Ye who are neither living nor yet dead
What Fury's victims, what Tartarus' wrecks
Are ye, ill-laid upon a mother's lap
And ever wild, from your first hair, the blond,
To your last hair snow-white? The gods far-seeing,
Even the Fates exiled from light, are far
From you from the beginning; voiceless is
The mother, who holds you voiceless with a threat
 I come to build anew
Your fallen temple and to raise the altar,
That now lies prostrate, with a Faith that bids
You worship and bend down your knees before
Lifting you high by the Immortals' side

The answer is full of relentless defiance:

Make wings thy feet! Thy yard, a league! . . .
 Neither your altar, temple, nor your gods!
 We are the godless race,
 Whose word is blasphemy!
 The gleams Olympian, thrice-high, are turned
 To palaces for slayers!
 Let him be master high and maker low!
 Who knows this maker's name?
 Though here engulfed, we think; and in our prison
 We see and cry for ever unto them:
 'The wolves cannot be gods!'¹

Rebellious thought and unchecked growth of extreme individualism lead to wild deeds of utter lawlessness. The brutal instinct of strife awakens and we are in the "Age of Bronze":

Where the agents of wars and of ravages reign,
 Stern Violence, Enmity, Wrath; and they feast
 And they quaff a wine that is blood and is drawn
 From brazen and measureless casks; and their minds
 Are brazen, and brazen their dwellings and walls,
 And brazen their weapons, and brazen their breasts! . . .
 And when Death, the Vanquisher, came, on their fields
 No corn-ears lingered, no roses bloomed,
 And no ivy blossomed on tree-trunk or fence.
 A nakedness brazen about, and a glow,
 And the threat of the thunderbolt's quivering fire! . . .²

Yet even through the world of wild confusion and hate, we are led to what is divine and heroic. Greatness of action rises in all its splendor from the midst of lawlessness. Need and hardship breed the doers of great and splendid deeds. Thus we pass into another age:

There is the world of demigods and heroes!
 Before the City of the Seven Gates,
 A trumpet peal has sounded deep;
 A trumpet peal has sounded deep,
 And lo, the Golden Gates are creaking,

¹ Cf. Hes. *Works and Days*, vss. 127-43.

² Cf. *Ibid.*, vss. 143-56; and *ibid.*, 150:

τοῖς δ' ἦν χάλκεα μὲν τεύχεα, χάλκεοι δέ τε οἶκοι,
 χαλκῷ δ' ἐργάζοντο . . .

The Seven Gates of gold are opened!
And dreams of mighty wings and giant works
Mingle with majesty in long array¹

But even such an age passes by rapidly:

In vain! The trumpet peal, the deep,
Is echoed mockingly
In the untraveled gorges
And in the table-lands wind-beaten;
And in the lonely chasms,
The shameless Satyrs mock and dance!
Where are the dreams of deeds?
The deeds of dreams, where are they?
Deserted is the land of demigods

Thus from greatness bred by might and enthusiasm we pass to an age in which might degenerates into base wickedness and enthusiasm fades away into thirst for filth. We are in the "Iron-moulded World"—

Where fathers hate their children; children revel
In their own fathers' death;
And brothers slaughter brothers joyfully,
And home is a lair of wolves.
Sun's frightful ghost, man breeds and wallows low
In rotten swamps of life.
For staining her, Night even curses him,
Lust-hunter, doer of wrong!
Crime is lord! Violence, mistress! A bitch, the woman!
About thy body pure,
Trembling thou foldest thy raiment white, O Shame,
And fleest away on wings!²

The ancient poet of the *Works and Days* and of the *Theogony*³ introduces the myth of Pandora independently of the five ages of man early in his first work, in order to illustrate his belief that the gods have rendered our lives futile and difficult. Again the story

¹ *Ibid.*, 156-74.

² Cf. *Ibid.*, vss. 174-202; and *ibid.*, vss. 197 ff.:

καὶ τότε δὴ πρὸς Ὀλυμπον ἀπὸ χθονὸς εὐρυδείης
λευκοῖσιν φάρεσσι καλυψάμενω χροῖα καλὸν
ἀθανάτων μετὰ φύλον ἔτον προλιπόντ' ἀνθρώπων
Αἰδῶς καὶ Νέμεσις

³ Cf. *Ibid.*, vss. 59-105, and *Theogony*, vss. 571-84.

is told objectively as something that has happened in the past, when the evils were first scattered among mankind from Pandora's box. Palamas, on the other hand, makes Pandora the symbol of passionate physical love and gives it in our development the next place after the Iron Age:

And she was moulded tenderly of all
 Virginhood's crowning foam, the undefiled,
 A being great, remote, and light; a tower
 A Spirit raises 'midst ethereal roses;
 A being white, yet more than white, and gleaming. . . .
 And in her hands, the covered basket shook,
 Filled with abundant fruit, a worthy offer
 To the Immortal Gods. And on its sides
 And on its cover, in drawings finely fitting,
 Seeming the work of breath and not of hand,
 All youthful loves and youthful flowers of Spring
 Merrily danced and kissed and joined their hands
 The Garden of Dawn's Castle was the place;
 The time, an hour stamped apart by Fate;
 And she, the god-sent plight of Earth, itself!
 And she was called Pandora, the All-gifted!

All nature speaks warningly against this fair destruction, a warning, of course, which always proves vain. Passion's plea is unrestrained, and with blind eyes we see in our love a world of fascination born of shapeless chaos.' Whether she is a giver of life or of destruction, Pandora is a victorious conqueror. Mankind is always willing to lie prostrate at her feet, and we surrender all to her:

Passion unbridled drags me on, a rider
 O'er narrow paths and slippery ravines;
 And as I fell, it trampled me beneath
 Its iron hoofs. The knife of Love, the Giant,
 Struck me; and I decayed with quenchless longing
 And perished painfully. I died and passed
 Into the ice-bound world of utter Darkness
 To drink the water of Denial's Spring
 From sweet Denial's Dale

Thus love is the culmination of our physical growth. With it the wild seething of our blood ceases, and we are transferred to the

Elysian fields of thought and contemplation, where Persephone reigns, "double and one, Death's Queen, Life's Maidenhood," at whose feet we grow calm and still. This new queen takes us away from the physical and ephemeral, frees us from the bonds of interested emotions, and shows us the universe from the mountain-tops of thought. Then it is that the mysteries of Life and Nature are laid open before us; and when the lyricism which transcends all finds expression in us, then the thinker and the poet are born:

And a God's rapture filled and lifted me,
 Maker of Gods; and I believed my hands
 Made thee, O world I dreamed in the world of Rhythm!
 For when the Lyre speaks unto Light her word
 Of gleam, the rock awakes, the tame soul swells,
 The tiger weeps, the wolf kneels down before it.
 And when the Lyre sings in the depths of Night,
 A winged flesh of light, it seems, lifts up
 The shadows and brings them purer back to Life;
 Even the Charon's boat moves on, swan-like;
 The Furies' vipers turn to blooming flowers.
 And when the Lyre speaks unto the Sun or Darkness
 Her word of gleam, air demons droop grief-laden
 Earthward; and Gods Olympian and Kings
 Infernal stay, forget their majesty,
 And listen spell-bound like mortals, even they!¹

¹ These verses seem to have been suggested by the Hesiodic passage of the *Theogony*, vss. 94-103:

ἐκ γὰρ Μουσᾶων καὶ ἐκηβόλου Ἀπόλλωνος
 ἄνδρες ἀοῖδοι ἔασιν ἐπὶ χθόνα κithαρισταί·
 ἐκ δὲ Διὸς βασιλῆες · ὁ δ' Ὀλβιος ἐντινα Μοῦσαι
 φιλῶνται · γλυκερὴ οἱ ἀπὸ στόματος ῥέει αὐδὴ.
 εἰ γάρ τις καὶ πένθος ἔχων νεοκηδέϊ θυμῷ
 ἄζηται κραδίην ἀκαχήμενος, αὐτὰρ ἀοιδὸς
 Μουσᾶων θεράπων κλεῖα προτέρων ἀνθρώπων
 ὑμνήσῃ, μάκαράς τε θεοὺς, οἳ Ὀλυμπον ἔχουσιν,
 αἰψὺ δ' ὅγε δυσφρονέων ἐπιλήθεται, οὐδὲ τι κηδέων
 μέμνηται · ταχέως δὲ παρέτραπε δῶρα θεῶων.

There is also, as Professor H. W. Smyth has pointed out to me, a striking similarity between these verses of Palamas and the opening verses of the first Pythian Ode of Pindar:

ΣΤΡ. Α. χρυσέα φόρμιγξ, Ἀπόλλωνος καὶ ἰοπλοκάμων
 σὺνδίκων Μοισῶν κτέανον · τὰς ἀκούει μὲν βάσις,
 ἀγλαΐας ἀρχά, (Continued on p. 174.)

When this is attained, we are reconciled with the universe, and a new love, more lasting and more vital, is born in us—a love toward all things, and even toward those that have injured us. The choice of Persephone to symbolize this new love of thought and contemplation that finds expression in song is one of the happiest inspirations of Kostas Palamas. The hymn which he sings in honor of the virgin divinity, who causes the lyre strings “to flow with Immortal Harmony,” is full of beauty and power almost Pindaric. I shall not quote from it because it contains no Hesiodic reminiscence. With the raising of Pandora to symbolize physical love, Palamas leaves Hesiod, and wanders on his trail of thought alone, although Hesiod continues to be the speaker to the end of the poem. On Persephone’s chariot, he rises again to the world above. There he recognizes the poet of the new Greece as “his flesh and heir,” a lover of the great things which the many scorn as humble, and hands him his lyre with words that carry us back to the lines from Virgil’s sixth eclogue, placed by Palamas under the title of his poem.¹ His closing words are:

My simple songs,
My artless words, found fire in Tartarus
And light in the Elysian Fields, and back
They come. Hear them again deep, epic, great,

ANT. A. πείθονται δ' αἰδοὶ σάμασιν,
ἀγχοῖσι χόρων ὅπταν προσιμίων ἀμβολὰς τεύχης
ἐλελίζομένα
καὶ τὸν αἰχματὰν κεραυνὸν σβεννύεις
ἀνάνου πυρός· εὐδαὶ δ' ἀνὰ σκάπτῳ Διὸς αἰετός,
ὠκέϊαν πτέρυγ' ἀμφοτέρωθεν χαλάζαις,
ἀρχὸς οἰωνῶν, κελαινῶπιν δ' ἐπὶ οἱ νεφέλαν
ἀγκύλῳ κρατὶ γλεφάρων ἀδὸν κλαῖστρον, κατέ-
χευας· ὁ δὲ γνώσσω
ὕγρον νῶτον αἰωρεῖ, τεαῖς
ριπαῖσι κατασχόμενος. καὶ γὰρ βιατὰς Ἄρης,
τραχείαν ἀνευθε λιπὼν
ἐγχείων ἀκμάν, λαίνει καρδίαν
κώματι, κῆλα δὲ καὶ δαιμόνων θέλγει φρένας,
ἀμφὶ τε Λατοῖδα σοφία βαθυκόλπων τε
Μοισᾶν.

¹ Virg. *Bucol.* vi. 69-71:

“Hos tibi dant calamos, en accipe, Musae
Ascraeo quos ante seni, quibus ille solebat
cantando rigidas deducere montibus ornos . . .”

Touched by the mystic circles of the world
 Beyond! The stammer became the word;
 The drop, a mother-fountain! Take my soul,
 Too! Take it into thy body, Thou!

Is it too much to believe that the "Ascraean" of Kostas Palamas is the greatest poem inspired by the humble poet of Ascras since Virgil's day? The Roman poet has kept close to the agricultural nature of Hesiodic poetry. Palamas has abandoned that side entirely, and found inspiration in the Hesiodic legends which have given his creative imagination a freedom of expression and interpretation which could at the same time fit his own genius and the pulse of his age. Certainly, the greatness of the modern work is a high tribute to that ancient and much-neglected poet, who should be read more than he is. However this may be, he has undoubtedly given the poet of modern Greece an enviable material of which to build his imposing temple of faith.

To conclude, both Hesiod and Palamas, smarting under the injustice heaped upon them by their contemporaries, make their sufferings a source of inspiration for their song. They both love the little and humble, and discover nobility and greatness in lowliness. They both cling to the legends, lore, and speech of the common people, and find beauty in their daily life and occupations. Hesiod, the poet of a primitive age, vivifies his narrative and didactic poems with a dawning personality that expresses itself through the candor, simplicity, and objectiveness of an unsophisticated age. The Hesiodic visions are splendid and beautiful, but nevertheless the visions of a child. Kostas Palamas, belonging to an age in which extreme individualism is impatient of lessons and maxims, drifts away from primitive simplicity in expression to a complex form that stimulates the mind with a problem without solving it, and fills the poetic demand with a magnificent display of sound, picture, and emotion. In short, Palamas has transcended the Hesiodic vision with a deeper individualism; he has unified it with profounder thought and finer lyricism; and, with his gorgeous imagery, his burning feeling, and his modern philosophy, he has shown most convincingly that the "Great Pan" is not yet dead, and that the ancient fountain-heads of human culture are not yet dry.

THE DECLINE OF ROMAN TRAGEDY

BY TENNY FRANK
Bryn Mawr College

It might be wise to refrain from any attempt to explain the ebb and flow of literary forms until psychology has become a science. But so long as most of the things worth knowing are beyond the sphere of precise formulation, so long as the human intellect eludes the chemist's retort, we must continue to extract half-truths from the occasional experiments that history deigns to work out for us. We shall probably never know precisely why the stage of Elizabeth swarmed with the creations of surpassing imagination, why the eighteenth century lost the power of song, why the age of Pericles crammed one small city with a world of ideas and forms of beauty; but problems so vital will not down.

Roman tragedy, as we know, enjoyed more than a century of unquestioned success. Livius produced his first translation in 240 B.C. Accius, the last poet to write a really vital producible tragedy, died, a very old man, not long after the Social War. We have record of some seven or eight plays by Livius—translations of course; some six tragedies and two praetextae by Naevius, twenty tragedies and two praetextae by Ennius, twelve or more tragedies in addition to a historical play by Pacuvius, and some forty-five tragedies besides a *Brutus* and a *Decius* by Accius—and our list is of course far from complete. Then follows almost complete silence.

The critics have offered an array of causes for this decay of tragedy at Rome, even as they have explained a similar subsidence of productivity after Euripides and Shakespeare and Racine in other countries. Yet I am not sure that an all-sufficient answer has appeared. The ways of poetry are very obscure, and, as Bergson reminds us, the intellect is characterized by a natural inability to comprehend life. There may be some truth in the statement that Roman tragedy was somewhat too exotic to make a lasting appeal. We must give at least a partial assent to the theory that

the Roman audience was being gradually debauched by the more exciting spectacles of the arena which were gory enough to supply the "tragic purgation of emotion" in more concentrated form than could the drama. Perhaps, too, we must admit a scarcity of genius at Rome—a thing, however, which apparently we need not assume for the explanation of similar phenomena in Greece. The critics tell us, moreover, that the extensive histories of Rome, written with all the art of dramatist and rhetorician between the Gracchan and Ciceronian periods, supplied the imagination of their readers with more vital matter for thought. Certainly there was no lack of heart-stirring episodes in the ninety-seven books of Gellius, the Punic war of Coelius, the long contemporaneous history of Sempronius Asellio, the autobiographies of men of action like Gracchus, Scaurus, Rutilius, Catulus, Sulla, the romancing histories of Claudius Quadrigarius, Valerius Antias, Sisenna, and Macer, some of which extended over seventy-five books. Again, we are informed that a satisfactory substitute for the drama was afforded by the exciting battles of the forum. Cato's incisive speeches—one hundred and fifty of them—were available, and Cicero discusses some fifty orators of note between Cato and his own day. Those speeches dealt with all the contests of the world that counted, and the man who enjoyed emotional excitement could indulge himself to his heart's content almost any day if he would but go to the forum. Here apparently are reasons enough why the Romans failed to continue the traditions of Ennius and Accius.

And yet these explanations do not entirely suffice, for they assume that the demand for tragedy had disappeared, which apparently cannot be proved. Indeed a review of the evidence will show that the old repertoire was still being produced to eager throngs in Cicero's day. Casual as all our references are, nevertheless we can make a long list of plays produced at that time.¹ Of Ennius' tragedies we know that the *Andromache*, the *Telamo*, the *Thyestes*, and apparently the *Alcurneo*, the *Iphigenia* and the *Hectoris Lutra* were then staged. Cicero mentions seeing the *Iliona* of Pacuvius, and speaks of the same author's *Antiope* and also a play containing the character of Orestes as being repeatedly given.

¹ See the testimonia in Ribbeck's *Scaenicae Roman. Poes. Frag.*, Vol. I.

In fact the actor Rupilius "starred" in the *Antiope*, using it as his sole play (*De Off.* i. 114), while the *Orestes* was a particular favorite of the gallery gods (*De Fin.* v. 63). When we recall the rather abstruse themes of the scholarly Pacuvius, these facts speak eloquently for the intelligence of the Roman audience. Accius was even more popular. The *Atreus* was a great favorite (*De Off.* i. 97) and Aesopus had to give it repeatedly (*Tusc. Disp.* iv. 55). The *Eurysaces* was given in 57, the *Clytemnestra* in 55, the *Tereus* in 43 after the authorities had "censored" the *Brutus* because of its political significance; and the tragedy given by Diphilus in 59 was also probably Accian. An undated production of the *Epigoni* is referred to in *De Off.* i. 114. Moreover, we hear of an *Equus Trojanus* enacted in 55, a play containing the rôle of Ajax presented by Aesopus, and repeated productions of a *Telephus* (*De Orat.* iii. 102).

These references, when we consider their casual character, imply that the supposedly tiresome old plays did after all appeal to the crowd. And this inference is supported by the record of salaries that actors like Aesopus and Roscius drew. The former, despite his prodigal son, left a fortune of twenty million sesterces, while Roscius, who, to be sure, played comic as well as tragic rôles, received a thousand denarii for a performance, and earned ordinarily some 600,000 sesterces per year. Both men were apparently kept busy through every festival season. And be it remembered, these men produced only the old plays. Besides these actors we hear of Rupilius, Antiphon, Diphilus, Panurgus, Eros, and others who stood high in the esteem of playgoers. This does not justify the assumption that the ancient plays were losing their hold upon the people.

Have we not on the other hand been too ready to overestimate the popularity of the coarser forms of amusement given at this time? The gladiatorial shows and the beast hunts, both foreign importations, required some time for acclimatization. When the gorgeous spectacles of 55 B.C. were given by Pompey the crowd was not yet sufficiently brutalized to enjoy the sight of *praeclara bestia* pierced by the hunting spear (*Cic. Fam.* vii. 1, 3), and Pliny relates how the populace pityingly rose and cursed the great general for his show.

Such delicacy about the spilling of wild beasts' blood did not last long, perhaps, for the city was rapidly filling with a race brought up to feel the lash; but the evidence is unquestionable that in Cicero's day the arena had not drawn away the crowd from the theaters where the tragedies of Ennius and Accius were produced.

Moreover, I am not sure that we do not underestimate the power of those plays to appeal to the Roman audience. It is easy to say that Greek myths seem to contain little that might interest the Roman. But the truth is that these plays did draw; and the real question to consider is why they did so. The answer in part lies in the fact that the themes were after all not essentially un-Roman. It is significant that Livius and Naevius drew largely from the Trojan cycle and thus brought up the populace on what was in reality a Roman topic; for were not the Romans Trojans? The tale of Rome's foundation by Aeneas had now become the accepted version. Every Greek history so taught the story. The state itself had officially recognized the version in dealing with Segesta in Sicily, and was presently ready to use it in its political dealings with Aetolia and the Asiatic cities of the Troad. The story had certainly found its way into the restored priestly records, and presently Naevius canonized it in his Latin epic. What could be more exciting than to see played before their very eyes the striking exploits of their long-lost ancestors as composed by the greatest poets of Greece? If the plays seemed at first somewhat exotic in tone, that was not a justification for criticism. The Romans felt rather that the plays represented a higher plane of civilization which they must try to comprehend and conform to. Failure to understand their own heroic ancestors merely implied a decadence in the race, which could never be admitted without shame. Consequently, instead of criticizing, they set themselves the task of correcting their own taste according to the new standards till all sense of foreignness disappeared. Then since the Theban and Argive tales attached to the Trojan cycle, these were also reproduced, until Rome had thoroughly assimilated the whole body of Greek heroic legends. The vital bond of sympathy which shaped itself from awakened pride brought them to an easy comprehension of these tragedies.

Fortunately for the success of such plays they were at first produced apparently with Hellenistic staging, that is, unhampered by a static chorus, a thing so difficult for a translator to manage and so difficult to grasp for a foreign audience not brought up on its historical significance. Later the chorus was more freely used, but the change came gradually, and the convention was adopted according to needs and desires. As time went on, the plays too changed in content, idea, and emphasis. Livius had apparently translated quite faithfully, but the later dramatists adapted freely.

When Ennius found that the opening scene of the *Iphigenia* seemed verbose and moved slowly, he cut the discussion of motives and opened the play with the sisters upon the battleground searching for their dead brother. When the unity of time and place imposed demands which were no longer legitimate because of the freer handling of the chorus, Ennius shifted the scenes, as is apparent from the fragments of his *Hectoris Lutra* and the *Medea*. And Accius went even farther. By his day the better plots had all been used. There was no point in mere retranslation in such cases, and he seems to have perceived even better than Naevius and Ennius that Roman problems of ethics, law, and social forms frequently called for new readings of old tales with a shift of emphasis—for, after all, the clash of custom and enlightened conscience illustrated in such plays as the *Orestes* and *Oedipus* and *Antigone* could not have the same meaning in second-century Rome as in fifth-century Athens. Similarly the position of women at Rome made the Greek version of such plays as the *Medea* and the *Agamemnon* seem unsatisfactory. Consequently the new versions that Pacuvius and Accius gave to the dramas first translated by Livius and Naevius, were often a modernization and adaptation to immediate social conditions of the kind that Euripides furnished Greeks from the plots already treated in a more conservative age by Aeschylus. The liberties taken were probably not as great, but they show the same trend. We may illustrate the point with Seneca's *Medea*, since here we have a complete play which shows what even an uninspired Roman dramatist might do by way of rereading an old story. *Medea* in the old unvarnished myth of the barbaric age was apparently a bundle of natural passions, a

savage being gifted with superhuman powers. A Greek prince owed this creature his life, but since she could hardly be his wife, a queen in a Greek court, he might, in Greek eyes, abandon her when his higher duties to state and position demanded it. In a rage of jealous hate, the creature wreaks vengeance on Jason and Jason's children. This was quite comprehensible to the semi-barbarous age that shaped the myth. To Euripides, however, it could not be true psychologically, for human beings had grown gentler. He accordingly tried a new explanation of the problem. From his point of view Jason had apparently disregarded the higher demands of humanity for a selfish passion or a more selfish ambition. Medea, the woman, had been infinitely wronged, and in her helplessness—it is not all jealousy and hate—she slew her children to save them from a worse fate. She could

Not wait yet longer till they staid
Beneath another and an angrier hand
To die.

But to the Roman even this interpretation seems impossible, and the character of Jason least comprehensible of all. A Roman prince could not so abandon his sons, and the woman, if she was indeed human, could not slay her children either in hate or in love. Seneca, therefore, while keeping the main plot ascribes a new motivation to it. Medea is again painted as the barbaric witch that she was before Euripides. Jason marries Creusa for the sake of his children—that was quite Roman—and the uncontrollable Medea is driven into a rage that does not hesitate to commit murder. However jealous she might have been, Seneca feels that she would not lay hands upon her own offspring. And yet the tale said that she did. Seneca's solution is simple. Woe has driven Medea insane and the ghost of her brother hovers before her. Accordingly in a fit of madness she does the deed. In Seneca as in Euripides the action follows the ancient myth, but the psychological interpretation of that myth varies with the author, and in both cases this reinterpretation is not so much an invention of the dramatist as a reflection of the changed point of view of the audience. The moderns have felt the same need for a rereading of the story

as the widely differing versions of Grillparzer and Catulle Mendès demonstrate.

This will illustrate in a measure what dramatists like Pacuvius and Accius undertook to do with many an old plot which they reproduced for Rome. In Clytemnestra, Accius seems to dwell not upon the fateful fall of the proud lord Agamemnon, but rather upon the psychology of the Queen who after ten years beholds her lord returning—with Cassandra in his train. In his tragedy on Atreus he is not interested in the wrongs of a prince whose children have been slain by Thyestes, but rather in the crimes begotten of tyranny, a subject always popular at Rome. Similarly Astyanax, the boy who represented the hope of fallen Troy, probably appealed more strongly to the Romans than the woes of the Trojan women. Modernizations and Romanizations are also apparent in the *Philoctetes*, the *Phoenissae*, the *Telephus*, and the *Andromeda*, and we should of course find many more instances if we had anything but a few tantalizing fragments of each play.

It may well be that some of these revisions had already been made in part by Alexandrian dramatists, but that must be left to futile conjecture. The high regard of Cicero for the Roman tragedy despite his familiarity with the Greek drama—a regard which is proved by an acquaintance with the plays that could hardly be matched by a modern statesman's familiarity with Shakespeare—indicates that the great Roman writers of tragedy presented living and convincing characters. The vogue of the plays throughout the Republic despite the counter-attractions of the lower forms of amusement offered to the crowd should convince us that they carried a message to the people. Mere garblers and paraphrasts these dramatists never were. They made the characters of the old myths speak words that struck home to their own audiences.

Apparently then the decay of Roman tragedy was not due to any lack of vital qualities in the plays available, a fact which suggests at once that the difficulty lay not with the kind of play nor with the populace. The real reason seems to be that the Roman dramatists had exhausted their material, that is, the material suitable in their day for their purposes. If one reviews the themes used by the early Latin dramatists the fact becomes apparent that

by the first century the available Greek myths had practically all been used. At first they had been paraphrased with only slight omissions of abstruse portions and minor adaptations of the old technique. Then the later dramatists had retold the tales, reinterpreting freely to suit contemporaneous social conditions and the character of the Roman audience. Before those myths could profitably be used again there must be so great a change in society, with so decided a shifting of moral values, that the Accian interpretation would seem inadequate and obsolete. Such a change had taken place between Aeschylus and Euripides, but no such change occurred immediately after Euripides nor very soon after Accius.

After both of these dramatists, therefore, a new fund of themes was necessary if tragedy was to live. So then the question arises whether there was any such fund to which a hypothetical successor of Accius could turn, granting that he had the power to shape the material once he found it. The obvious answer seems to be that Roman history or daily experience might have supplied the need. However the solution is not so easy. The first six books of Livy now seem to us full of dramatic incident, but it must be remembered that very much of this legendary material was a product of the rhetorical and romancing historians of the first century and non-existent before then. Indeed fate was not kind to the poets in search of legend at Rome. For centuries the Latin tribe had been exceedingly small and had apparently engaged in few exploits worthy of the telling. Moreover in the early days Roman religion knew nothing of personalized deities to which primitive man relates his heroes and this fact of itself checked the myth-making faculties. The Romans then were denied both myths and heroes sprung of gods. When the time of greatness came, and deeds were performed that could with the aid of the imagination have matched the labors of Hercules, they had had foisted upon them by the Etruscan and the Sibylline priests the whole Olympiad crew. Then they tagged Greek names to their spirits, attached the appropriate Greek myth to their innocent spirit-gods, and the mischief was done. Even so, had the Romans been left to a slower process of sophistication, their native heroes might in the twilight have grown to

superhuman stature. But for this the processes of civilization spreading through the close contact with Greeks and Etruscans worked too quickly. The Romans began to write laws and keep historical records in the Regia. And when heroes have their victories recorded on cold stone with names and dates and treaties attached, what chance have they of growing into semi-divine workers of wonders? To be sure there were some tales of dramatic value even in the second century—Romulus and Remus, the Sabine Women, Brutus and Lucretia, for instance—and these were used. In fact the *Brutus* of Accius with its complete freedom from the rules of unities shows how easily the modern forms of drama could have developed had more of this material lain at hand. The dramatists used historical figures, Decius, Marcellus, Paullus for instance, but here the knowledge of facts was restraining. History seldom deigns to shape the deeds of everyday life for the convenience of the dramatist. And other legends, of Coriolanus and Camillus for instance, were not yet in existence in the form we know them. The past then, Greek myth as well as Roman legend and history, had been used as far as it was available. It could offer little inspiration to new effort.

The only alternative would have been to invent both characters and plots, drawing upon the experiences of daily life for material as the modern realist does. But a moment's reflection will show that it is an anachronism to assume that this might have been done. Greece did not take this step after Euripides, nor France after the classical period, nor England after the Elizabethan successes, and conditions at Rome in the days of Accius were analogous to those in the countries named. Though the dramatic instinct seems always to be presumable, the drama depends upon social conditions and must draw its life from that which society provides. Its evolution has accordingly been a fairly consistent story. Early tragedy assumes the rôle of interpreting the most sacred and time-honored of a nation's stories. The sufferings, thoughts, emotions of the great—heroes, demigods, and kings—are worthy of presentation, and these alone. At first the tale must not be altered, it must be told as nearly as possible in the way hallowed by tradition. As time goes on, however, and men have changed, the tale thus told

will seem out of concord with human nature; then the dramatist may retell it, suppressing what has grown obsolete, emphasizing the elements that still seem true to experience. A very daring realist will venture to present Telephus in tatters, but the critics will be upon his heels immediately. For the hero will remind you of a beggar, and it would be desecration to set mere man upon the stage made for the demigods that the festival crowd should weep at his woes. Mere man belongs in comedy; you may laugh at him and with him, but life's great lessons are illustrated only in the characters of the great. And that is where Euripides stopped—was doubtless compelled to stop. And it is nearly where Shakespeare found the outward boundary in his tragedies. His tragic plots derive from the old Chronicle, or from Ancient Rome, or at least from foreign lands sufficiently removed from his audience by a haze of unknown space, and his tragic characters never represent the man of contemporary England. They are as real and human as the man of the street to be sure; but that is after all not the same thing. If we attempt to realize Elizabethan society, and its conception of the function of tragedy, then suddenly shift *The Doll's House* or *The Second Mrs. Tanqueray* to the Globe Theater, we immediately realize the difficulty. Nora is unthinkable upon the Elizabethan stage, except in a comic rôle.

Realistic tragedy is of course a thing of slow growth, or perhaps we should say that a nation fits itself slowly for the reception of it. Comedy paves the way somewhat. When the great may not be laughed at, it is well that comedy presents the foibles and deformities of the common man if it be merely for ridicule. Slaves served the purpose well enough for Menander and Plautus, though it was well to keep up the dignity of the art by not centering the title-rôle on them. As a matter of fact the study of the mean subject contributes directly and very largely to the understanding of the ordinary character as material for tragedy. Shakespeare's portraiture of Shylock for example carries him so far that modern critics do not know where comedy ends and tragedy begins. In the *Andria* and *Heauton* of Terence the emotion shifts more than once to deep sympathy. But something more was needed than the dramatist's study of the man of the street. Human society

itself must sustain a shock before the miracle can happen. Democracy has not a little to do with it. A period of liberal thought which humbles the lordly usurper of the title-rôles and elevates the man of low degree until he gains the respect of the world, that is above all necessary. The Roman crowd was hopelessly permeated with snobbery encouraged by the institution of clientage. The franchise was extended early and widely, and the laboring man felt princely when he was solicited for his vote. That should have elevated him into an individual fit for consideration in literature perhaps. But the fact remains that at the election he scorned to vote for the "new man." The noble whose hall was filled with ancestral portraits was alone considered worthy of high position. The power of democracy had not yet succeeded in leveling men to the point where realism was possible in the dignified forms of art. It is noteworthy that in France the spirit of Rousseau and the revolution lay between Racine and realistic tragedy, in England, Cromwell's Commonwealth and a long line of liberal theorists came before the new era. In Greece, democracy was more of a reality, but there the religious conservatism that kept the play at a festival season as a part of a sacred ritual probably had something to do with hampering progress. In Euripides' day, interest in the lowly man was apparent in philosophy and was soon to appear in art. Had Athens been granted another century of natural development it may be that the drama would not have had some two thousand years to wait for this new creation.

With these facts in mind I think it becomes apparent that it involves an anachronism even to put the question why Roman tragedy did not take the next step and create its plots and characters out of the everyday experience at hand. Roman society was not yet ready for that step. *Odi profanum vulgus et arceo* was in a very real sense the attitude of high art toward the lowly subject, and necessarily so. By the day of Marcus Aurelius perhaps a change might have been possible. The empire which humbled the aristocracy and sought the plaudits of the crowd was in fact a better leveler of classes than the aristocratic republic had been. Comedy and its successors, the farces and mimes, continued to present ordinary humans upon the stage, if only for

ridicule, and helped at least in the analysis of character. Then came the keen social study of Petronius; and the novel has always been a pathfinder toward realism. What would not a half-dozen books like the *Satiricon* have done? In Hadrian's day, too, there is a broader humanity apparent, a greater sympathy for suffering in all stations of life, a tendency toward self-analysis and an interest in psychology in whatsoever subject. All this led close to the mark. But Rome had by this time become a city of foreigners, and Roman art and literature were already gasping for breath. The realistic tragedy for which society might have been prepared could hardly come to life when all forms of literature were perishing. It seems then that the decay of Roman tragedy was not an isolated phenomenon. We need not attribute its lapse to any lack of appreciation on the part of the populace, nor need we assume that genius was lagging to fill a need. The stock in trade of suitable matter fitted to the needs of that age had been made to yield all it contained, just as in the first great periods of dramatic art in Greece, France, and England. Neither Greece nor Rome lived quite long enough to create social conditions out of which the next great impulse could come.

A GREEK CONCEPTION OF THE CONSTITUTION OF MATTER

BY JOSEPH B. PIKE
University of Minnesota

The following striking statement of Sir Henry Maine stands as a text to Book I of Gomperz' *Greek Thinkers*: "To one small people it was given to create the principle of progress. That people was the Greek. Except the blind forces of nature, nothing moves in this world which is not Greek in its origin." The more one studies and thinks with this text in mind the greater the marvel grows, for the Greek influence really does extend into fields which, at first thought, it would not seem to have reached. Indeed, in the course of these pages it will be apparent that though Greece of course had nothing to do with the movement of the blind forces of nature, she had a great deal to do with the explanation of their causes.

The theories of the early Greek philosophers as to the basis of the physical universe, important as they are in the history of human thought, possess at the present time for the most part merely an antiquarian interest. There is, however, one rather notable exception, the Greek atomic theory. This theory is a most striking exemplification of the intuitive faculty of the Greek mind. It was not the result of experiment or observation or conclusions drawn therefrom, but the result of the most abstract metaphysical concepts, and yet in its main outline the hypothesis is indispensable to science at the present time. Our colleagues in physics will tell us that recent discoveries with regard to radio-active elements, far from overthrowing the atomic theory, have but made its acceptance the more necessary.

Modern physics postulates that all substances, solids as well as liquids and gases, are composed of minute particles called molecules and that these molecules are in very rapid motion. When the term "molecule" is used exactly, it will indicate the smallest portion

of matter which retains its identity as a particular substance. Any further division would destroy the identity of the substance and reduce it to the atom. In the case of the chemical elements the atom and the molecule may be identical.

Recent investigations and discoveries have proved that enormous quantities of energy are locked up in the atoms of all substances. One widely accepted theory would make the atom consist of a nucleus of positive charges of electricity around which the negative electrons rotate rapidly. The physicist has before him the fascinating problem of endeavoring to unlock this store of atomic energy in order to turn it to the uses of man. The atom, therefore, is a live and vital thing, and it may be of some interest to consider the ancient speculations with regard to its nature and behavior.

We shall omit a discussion of the early Greek atomists before Epicurus and merely remark by way of preface that Leucippus, the father of atomists, owed much to the speculations of the Eleatic school, and that Democritus, the immediate precursor of Epicurus, did most for the development of that theory which Epicurus somewhat modified and adopted as the physical basis of his system of philosophy. We proceed directly to a consideration of this theory as taught by Epicurus and transmitted to us by Lucretius.

It is true that Lucretius did not, so far as we know, make a single contribution to the doctrine as formulated by Epicurus, but our debt to him is great because our understanding of the theory is due almost exclusively to his clear and striking exposition. How great this debt is, may be inferred by a comparison of the bare facts of the physics of the system, as outlined by Epicurus himself in a letter preserved by Diogenes Laërtius, with the vivid account of Lucretius.

We first give a résumé¹ of the theory and then consider how this tallies with known facts and theories at the present time.

There must be, argued Epicurus, as the basis of all existing things an unchanging and everlasting substance. This substance Epicurus calls atoms. Nothing is ever destroyed, but things are

¹ Munro's outline is followed for the most part.

resolved into their primal atoms. The sum-total of matter in the universe remains constant. Atoms are invisible; they never have been and never can be seen. Objects are formed by a combination of atoms and have in them void also, the second element in nature. Everything in nature may be reduced to these two terms, body and void, that in which body moves. Neither sense nor reason can grasp any third class. All qualities are either inseparable properties or are accidents of matter or void. Time exists not by itself; from the actions that go on, follows the feeling of past, present, and future. The deeds done at the siege of Troy, for example, did not exist by themselves, but were mere accidents of the men there or the places there.

Atoms are absolutely solid, having no mixture of void in them. As there is no object in nature perfectly solid, reason alone assigns this characteristic to atoms. First beginnings are of solid singleness—*solida simplicitate*, as Lucretius puts it—that is, with no mixture of void and absolutely indivisible. Postulate solid atoms, and soft bodies may be explained by the introduction of void into their composition. With soft atoms the existence of hard things cannot be understood. The absolutely solid and indivisible atoms have, nevertheless, theoretical parts, *minimae partes*—least parts, they are called. These parts have no existence apart from the atom. The atom, therefore, has not been formed from a union of these parts, but it has existed in it unchanged from eternity. The universe is absolutely limitless; this being so, space and void are infinite. So, too, the sum of things and matter is infinite; for space being infinite, if matter were finite, nothing in being could exist a moment, or rather, nothing could ever have been brought into a state of existence, for it is only by an infinite supply of matter that this earth and heaven can be maintained. As mere blind chance, not Providence, has arranged out of the atoms this and other worlds, these atoms never could have *thus* combined, had there not been an infinite supply of them. Atoms move ceaselessly through void of their own inherent motion or it may be after collision with others. Atoms of intricate shape after collision may form a close union and help compose hard bodies; others rebound to greater intervals and keep oscillating through these

greater intervals and thus form softer bodies. Lucretius uses the striking illustration of the motes of dust in a sunbeam to illustrate his conception of what must be the motion of atoms. Next considering the motes of dust, as they really are—objects formed by the combination of atoms—he argues that the single atoms have combined into very minute objects to which are imparted the inherent motion of the atoms. Then larger combinations are formed until we have the visible mote of dust with motion imparted by the atom, rising into the field of perception.

The motion of atoms is inconceivably swift. The natural original movement of atoms is downward. At quite uncertain times and places atoms swerve an imperceptible degree. Were it not for this swerve the continual fall of atoms in perpendicular lines through the infinite void would result in nothing. As a matter of fact they would to all intents and purposes be standing still. The theory of swerve is needed to bring them into collision and admit the creation of the world. This device is also required to break the eternal sequence of cause and effect and admit the principle of free will.

The sum-total of the universe was never more or less than it is now, and the motion which atoms now have they always have had and always will have. Though atoms are in constant motion, yet the whole universe appears to be at rest, because the atoms which compose it are far beneath the ken of our senses.

Atoms are of various shapes. The difference in shape of atoms is the reason for the variation of individuals of a given species. This is also the cause of the difference in volatility of some substances. Lightning can pass where ordinary fire cannot, because its atoms are finer; light passes through horn but water does not; wine runs easily, oil slowly, through a strainer. The different shapes of the atoms which compose the different substances are the cause of these phenomena.

The different sensations are also caused by the difference in the shape of the atoms. Honey is sweet, wormwood bitter. The former is composed of smooth, the latter of jagged, atoms.

The number of shapes of atoms is finite though very great; the number of atoms of each shape infinite. The alphabet which

we use serves as an illustration. There is a definite number of different letters, but an inexhaustible supply of any particular letter.

Atoms have no color and in fact none of the secondary qualities, such as heat, cold, sound, flavor, smell. A neutral element is needed to form the basis of all created things.

Atoms are without sensibility. All things that have sense come from insensible atoms as a result of the manner in which certain atoms of very subtle nature combine and as a result of the kind of motion resulting from this combination.

Since space is unlimited and atoms infinite in number, it is not reasonable to suppose that this world would be the only world, since it has been formed by a chance combination of atoms; there are in other parts of space like combinations of atoms or other worlds and, what is more, inhabited worlds.

As everything in nature grows by gradual steps, by taking unto itself that which it needs until it reaches the acme of its growth and thereafter begins to wane, and finally disappears, so, too, this world of ours will dissolve into its primal elements and the process of rebuilding will begin again and so on *ad infinitum*.

The particular *application* of this theory of atoms which we have just sketched contains little that is true and much that is absurd. An examination of the *doctrines* themselves, however, will reveal the somewhat surprising fact that the main outline of this ancient theory of the constitution of matter is substantially correct even in the light of the most recent experiments.

The statement that nothing is begotten from nothing and that nothing happens without a material cause must be accepted as applied to the material world in order that scientific knowledge may exist at all.

Nothing is ever annihilated, but is resolved into its constituent parts. This and the previous statement affirm the constancy of the total quantity of matter—a conception common enough now, but one for which antiquity had not yet the support of scientific proof. The conclusion, as usual, was reached by analogy. There was no proof of the destruction of matter. Change, however, is ever before the eyes. What appears to be destruction is simply change.

For the doctrine of void in things two proofs are adduced. If the universe were packed solid with matter no motion would be possible. This is not so, as we might have re-entering motion and there need be no vacuum. The other proof that the varying density of bodies is only to be explained by the admixture of void is the accepted theory for *ponderable* bodies today. Modern physics asserts, however, that what Lucretius calls void is filled with an imponderable substance called ether. Substitute hypothetical ether for void, and the ancient deduction as to the density of bodies is correct.

Atoms are hard and they are absolutely solid. This is incorrect. Even within our own recollection, however, the atom was described as hard, and we well remember picturing it to ourselves as a minute white billiard ball. Modern physics postulates a soft atom and attributes the hardness of things to the rapid motion of the soft atom.

The reason for the contradictory hypothesis of least parts was doubtless due to the fact that size, shape, and weight were attributed to atoms. Atoms, therefore, have extension, hence parts, and how can that which has parts be indivisible? This theory is of course incorrect. In connection with it, however, one naturally thinks of the electrons of the modern atom.

Nothing exists but matter and void. No third element can be imagined. It is argued that properties and accidents are not entities distinct from matter. This is true, but it does not prove that nothing exists but matter and void.

An attempt is made to show that every fact in the world can be explained by the properties of matter and that matter possesses very few simple properties. This proposition, if restricted to physical facts, is still held as true.

The contention that there must be some unalterable basis of matter, else all things would have been destroyed long ago, seems as sound today as it was in the days of Leucippus.

The proposition that the difference between all bodies is accounted for by the different arrangement and motion of atoms is sound. That is, matter is conceived as formed by atoms which are in constant motion. This idea so contrary to the evidence of

the senses, upon which Epicureanism based all knowledge, is the most striking example of the intuitive quality of the Greek mind; for in the light of modern investigation it has been proved to be perfectly true.

Some writers believe that Lucretius assumes his atoms to be elastic though perfectly solid. It is of course impossible for perfectly solid bodies to be elastic, hence they could not rebound on striking one another. Is it not more reasonable to suppose that Lucretius was ignorant of the fact that perfectly solid bodies could not rebound?

The behavior of the ancient atom after collision is quite in accord with that of its modern descendant, and a chemist or physicist will use terms similar to those of Lucretius in speaking of the collision, deflection, and bombardment of atoms or molecules. He will also speak just as Lucretius does of the oscillation of atoms in more or less dense bodies through greater or less intervals.

Atoms move straight down through void if they do not collide. This is incorrect. Lucretius failed to realize that there is no up or down in infinite space. He speaks of this motion doubtless as relative to the earth. It may be remarked that the difficulty that there is no up or down in infinite space seemed to trouble none of the early atomists who preceded Epicurus. The modern atom is subjected to the influence of the universal law of gravitation and its inherent motion will be similar to the motion of a planetary system. The tremendous velocity of the Epicurean atom receives the support of the exact measurements of the velocity of certain atoms by modern physicists.

The theory of the swerve of atoms has exposed Epicurus to much ridicule, both in ancient and in modern times. Democritus taught that in their fall through void the lighter atoms were overtaken by the heavier and the necessary collision occurred. Aristotle quite naturally objected that such could not be the case since atoms of whatever weight would, in void, fall with the same rapidity. Epicurus, accepting Aristotle's objection, formulated the theory of the swerve of atoms. This then was a very simple method of explaining creation and free will in man. Having ruled out of the universe everything but matter and void and yet believing

in free will, Epicurus boldly endowed his atom with free will, exercised, it seems to us, not constantly but, in Lucretius' words, at quite uncertain times. Guyau, the keenest of the interpreters of Epicurean ethics, claims that this spontaneity is ever inherent in the Epicurean atom. We cannot see that this follows from anything that the ancient authorities say of the system.

Lucretius, in stating that the swerve is so minute that it may not be called oblique motion, is following a common practice of materialists in making a difficulty as remote as possible and then disregarding it.

It has been suggested that had Epicurus had but a part of the geometrical knowledge of his contemporary Euclid, and that conception of cosmography which many men then living had, he might have discovered the laws of universal gravitation and not only the laws but—what was the despair of Newton—its mechanical cause.¹

In the statement that the sum-total of the universe was never more or less than it is now and that the motion which atoms now have they always have had and always will have, we find an anticipation of the doctrine of the conservation of energy.

In connection with the discussion of the shapes of atoms Lucretius speaks of the different rates of motion of the atoms, e.g., of a sluggish and a volatile fluid. As he believes that the rate of motion of atoms is constant, for he implies, we think, that the atoms even when they form a mass of iron or stone move as swiftly as they do when streaming through space, we encounter a difficulty. This difficulty or contradiction is due to the failure of Lucretius to distinguish between the molecule and the atom. Had he spoken of a molecule of these fluids, all would be clear. He nowhere, however, so far as we can see, makes this distinction. Giusanni, Lucretius' well-known Italian commentator, claims that he does, basing the claim upon the logic of the statement we are now discussing. The argument does not seem convincing. We detect rather a fault in reasoning on the part of Lucretius. Whether he has correctly interpreted Epicurus or has misunderstood him is not clear. The fact, therefore, that the Lucretian atom had to serve the purpose of the molecule as well, will help explain the conception

¹ "The Atomic Theory of Lucretius," *British Quarterly Review*, October, 1875.

of atoms of different shapes—smooth, jagged, hooked, etc. Crude as this conception appears, it will be remembered that the conceptions of chemical affinity which have replaced it are equally inadequate to their task and exist as mere conveniences of expression. If Lucretius implies, as we think he does—though we are not absolutely certain—that the motion of atoms in combination is constant, he is not supported by modern investigation. The rate of motion of the molecule or atom of hydrogen has been calculated at sixty-nine miles a minute, that of oxygen something like a fourth less.

Lucretius, in speaking of that combination of insensible atoms which produce sense, clearly indicates that he views life as a mode of motion of the atoms. Disturb this mode and we have unconsciousness; break it up and death ensues. We really know of no more satisfactory explanation of the phenomenon of death at the present time.

As stated before, the specific application of this theory of the constitution of matter contains little that is true and much that is absurd. The outline of the process of creation and of development on earth contains, however, some rather startling anticipations of the future.

At first nothing that now is, was to be seen—sun, stars, earth, sea, or heaven—but a strange chaotic jumble of atoms unable to combine; gradually the different parts of the world began to separate. The heavy particles of earth collected in the midst and squeezed out the lighter atoms of the other parts of the world; ether with its fires first burst forth and collecting on high formed the outmost sphere of the world; this is what Lucretius designates by the impressive phrase *flammantia moenia mundi*, "the flaming walls of the world." Between this sphere of ether and the earth, the rudiments of sun, moon, and stars took up their positions; the earth, rid of these lighter particles, sank down still more, where the bed of ocean is, and these depressions were flooded with salt water. The more the earth was beaten upon by the heat of the ether and the sun, the more it was condensed, and thus the ocean was increased by particles of moisture squeezed out of it and by the heavens by elements of fire which flew off from it. Thus the earth

sank to the bottom, and sea, air, and ether were left separate—ether above all gliding on its even way and mixing with none of the lower elements. This account of creation in its broad outlines is surprisingly similar to the nebular hypothesis of Laplace.

We need not follow Lucretius in his theories of the various phenomena of nature, for many of them are grotesque in the extreme and many opposed to correct views which were held even at that time. Among these may be cited his rejection of the theory of gravitation and the antipodes. He will often suggest several possible explanations of a phenomenon, stating that any one may be true and that it is a matter of indifference which is accepted. This unscientific procedure, typical of the attitude of the Epicurean school, is due to the fact that, though the system emphasized the importance of physics, as the ancient philosophers called it, the main interest of the sect was in the branch called ethics. As soon as Lucretius had established his thesis that the soul of man was material in structure, he was rather indifferent as to the strict application of the theory of atoms to the other facts of nature.

The theory of the survival of the fittest and the account of the growth of civilization are powerfully presented and in the main along correct lines, as follows. Many races of regularly organized creatures must have died off because they lacked some natural power by which to protect themselves; they fell a prey to others and disappeared, unable to endure the struggle for existence. Primitive man was much hardier then than now and lived like the beast in the field; ignorant of tillage, he fed on what the earth supplied of itself, acorns and berries, and drank of the running waters; he was without fire or clothes or home, without law, government, or marriage; he slept on the ground, not fearing the dark to which he had been used from childhood; his fear was the fear of savage beasts. Next the use of huts and skins and fire softened his body; marriage and the ties of family, his temper. Neighbors agreed not to injure each other and made treaties of friendship and alliance, which mostly they observed though not always. This last statement is interesting—that even before men had developed the faculty of speech they agreed by means of signs to live in peace with one another. That is, a mutual agreement to obey laws for

the common interest is the principle on which the Epicurean holds society to be based. In this doctrine Epicurus anticipated by many centuries the teaching of Rousseau.

Nature and need prompted men to the use of speech; lightning first gave fire to men; cooking they learned from the effects of the sun's rays, which they saw softening and ripening things. Every day men of genius invented improved methods of life, cities were built, lands and cattle allotted, at first according to merit, but soon the discovery of gold gave all power to the wealthy; men would not learn how little was needed for happiness; they therefore sacrificed everything for power and eminence. Kings were overthrown and anarchy followed, till nations weary of violence established laws and constitutions; their fear of punishment restrained men, as injustice generally recoils on the wrongdoer and if he escapes punishment he cannot escape the terrors of conscience. Men saw the seasons change and all the wonders of the heaven; they therefore placed their gods in heaven and believed that all things were governed by them.

The metals were discovered through the burning of woods which baked the earth and caused the ore to run. With these they made arms and tools. At first copper was rated more highly than useless gold and silver. For arms, men used at first hands, nails, teeth, clubs, then fire, then copper or brass, at last iron. Horses were first employed in war, then chariots, then elephants—strife begetting one horror after another. Weaving came into use after iron, as the web could not be woven without instruments of iron. Nature first taught to sow, plant, and graft; then one kind of culture after another was devised and more and more ground brought under tillage. Birds taught men song; from the whistling of the zephyrs through reeds they learned to blow through stalks; next the pipe came into use. With such music watchers would while away the time and derive no less pleasure than is now derived from elaborate tunes. Finally came walled towns, division of lands, ships, treaties between states, and, when letters were invented, literature.

Such is the epic of civilization sketched by Lucretius in powerful strokes and such is the complicated state of existence which has arisen as a result of the combination of the simple atom.

The classical atomic theory remained as formulated by Lucretius and rather unfruitful until the sixteenth century when Pierre Gassendi, a French philosopher, revived interest in it. He accepted the theory as outlined, with the exception that, being a churchman, he had God create atoms and void whereas the ancients had them exist from all eternity.

The modern theory of atoms as applied to chemistry was worked out by Dalton at the beginning of the nineteenth century. It is historically the Greek theory with this important difference. The theory of elements had been developed in chemistry and it was to that series of elements that Dalton applied his atomic hypothesis. The original element in his work was the theory that atoms were not of various shapes but that the atoms of different elements were different in weight. From Dalton's time the atomic theory followed two distinct lines of development—one in chemistry and one in physics. Subsequent experiments in physics have led to the isolation of the atom, and one hundred years after the adoption of the atomic theory in its modern form, science demonstrated that the atomic unit is made up of smaller units or electrons. The theory of electrons does not set aside the theory of atoms but goes beyond it.

We are accustomed to view Greece as the mother of all that we have of value in art and literature; is it not, however, somewhat surprising to find such a close connection between this old Greek theory of the constitution of matter and that modern hypothesis which alone permitted the development of the sciences of chemistry and physics? Indeed, we may go so far as to say that none of the ideas of antiquity have been more suggestive than this,¹ for modern scientific research takes its starting-point from the attempt so many centuries ago of Leucippus, the father of the atomists, to reduce qualities to quantities or, rather, to establish fixed relations between the two.

¹ See Gomperz, *Greek Thinkers*, I, 349.

ARCHAEOLOGY IN 1915

BY GEORGE H. CHASE
Harvard University

A year ago it seemed to me that a report on archaeology in 1915 would probably consist of a blank page and the motto, *Inter arma silet archaeologia*. It has been one of the surprises of the first full year of the war that not a few of the enterprises which I had occasion to mention in last year's report have been carried on without interruption, that some new undertakings have been begun, and that the war itself has been directly responsible for some discoveries. That the great struggle has checked the progress of research in many ways cannot be denied, but the amount of archaeological news from classic lands is certainly remarkable. It is probable, indeed, that much more has been discovered than is suggested by the scanty bits of information that I have been able to gather, for the difficulties of communication caused by the war have made it impossible to use several sources of information which I have found helpful in former years. Nevertheless, when I looked over the notes that I had collected, it seemed to me that they contained enough to justify the labor of putting them together, especially if they were accompanied by a warning that the report is, in the nature of things, most incomplete, and must be supplemented in many ways when the world returns to more normal conditions.

One notable feature of the year's developments has been the way in which, in the general mobilization of the resources of the nations, advantage has been taken of the special training provided by the "foreign" schools in Athens. Several members and former members of the French and British schools have been assigned to service as interpreters with the expeditionary forces of the Entente Allies in the Eastern Mediterranean and have there found opportunities for investigation in the midst of military activities. I have recently heard, for instance, that Professor Ernest Gardner is now stationed at Salonica, where he is busily

engaged, during his spare time, in the study of the monuments of the neighboring district. No doubt the Germans, the Austrians, and the Italians have made a similar use of the special knowledge of individuals, although, as it happens, I have heard of few such cases. A darker side of the picture is shown by almost every archaeological journal that reaches this country from Europe, in the notices of professors and students of archaeology "killed in action" or "reported missing." The growing list of names, many of them those of men who, though young, had made their mark, is an ill omen for the progress of archaeology in the near future.

Among the discoveries directly attributable to the war, the most interesting of which I have seen reports are those made on the peninsula of Gallipoli in the course of the unsuccessful attempt of the British and French troops to force the passage of the Dardanelles. In May, 1915, soldiers of the French expeditionary force, in digging trenches on the plateau of Eski-Hissarlik, a few miles from the extreme western end of the peninsula, came upon several tombs constructed of stone slabs. These were destroyed, but some of the contents, including vases and terra-cotta figurines, were preserved by the officers in command. Later, in June, a communication trench hit upon several sarcophagi near the same spot, and it was decided to attempt more careful exploration. The work had to be conducted very slowly, with not more than four men digging at any time, owing to the proximity of the Turks, whose suspicions would have been aroused by any considerable concentration of men. From July 8 to August 22, the excavations were superintended by Sergeant Dhorme, a priest who, at the outbreak of the war, was a professor in the College of St. Joseph at Beirut. He was afterward cited in the order of the day for having "dans une position avancée, soumise au bombardement ennemi, accompli sa tâche avec une ardeur inlassable et un mépris constant du danger"—probably the first time this honor has ever been conferred for such services. From August 23 to September 26, the *interprète stagiaire*, J. Chamonard, a former member of the French School in Athens, took charge and prepared a general report for the *Bulletin de correspondance hellénique*; and a careful catalogue of the contents of the tombs was drawn up by Sergeant Courby, another

former member of the school. In spite of the unfavorable conditions, no less than 37 sarcophagi and 17 clay jars which had been used for burials were recovered. The objects collected included vases, ranging all the way from an Attic black-figured cylix to Hellenistic forms; some terra-cotta figurines of archaic style, especially figures of Demeter, others of Tanagra types, and many of the third and the second centuries B.C., with Aphrodite and Eros as the favorite subjects, similar to the figures found by Pottier and Reinach at Myrina in Aeolis; and jewelry of a rather cheap sort, mostly in bronze, glass paste, and shell. The necropolis dates from the sixth to the second century B.C. Still later, on October 7, the work was resumed, under the direction of Lieutenant Leune, and only abandoned with the withdrawal of the troops on December 12. Much of this later digging was carried on by Senegalese soldiers. More tombs were opened, and among the vases were found some Corinthian wares of the sixth century.

The town with which this graveyard was associated was very surely the Athenian colony of Elaeus, famous in antiquity for a mound which was believed to be the tomb of Protesilaus, the first Greek to fall in the expedition against Troy. One cannot but wonder what were the feelings of the shade of the hero, if he still haunts the region of his tumulus, as he watched these strange beings from Western Europe and Africa destroying the resting-places of those who, to him, must have been very modern inhabitants of the shores of the Hellespont.

Elsewhere in Turkey no archaeological work appears to have been done. All the larger undertakings, at Pergamum, Sardis, Miletus, and Didyma, as well as the lesser enterprises at Phocaea, Colophon, and elsewhere, have been brought to a complete standstill by the war.

In Northern Africa conditions appear to have been less disturbed. I have seen frequent notices of explorations on a small scale by French scholars in Tunisia and Algeria. On the site of Carthage, in March, 1915, was found a well-preserved mosaic showing a race of four chariots and giving many interesting details of the arrangement of a circus. The construction of military works on the acropolis of Cyrene led to a number of discoveries, including

ruins of buildings, inscriptions, and statues. Among the latter is a figure of Zeus in Parian marble over two meters high, which is an excellent example of the Hellenistic type of Zeus Aigiochos, wearing the aegis over his left arm. This, it is announced, will be published in a newly established periodical, the *Notiziario Archeologico*, which will be published by the Ministero delle Colonie—a sort of *Notizie degli Scavi* for the Italian colonies. One of the inscriptions records the adornment of Cyrene by the Emperor Hadrian.

In connection with Cyrene, mention may also be made of a colossal figure with the head of Alexander the Great, which was found in the summer of 1914 on the spot where the now famous Aphrodite was discovered (*Classical Journal*, X, 99). This new statue has already been considerably discussed, especially on account of the peculiar attribute, a horse's head, which is carved on the base. Because of this the subject has been thought to be Alexander as Helios or a Dioscurus made into an Alexander by a change in the type of the head. The figure, so far as can be judged from small line drawings, appears to combine certain qualities of Polyclitan and Lysippic style and to be a work of the Roman age.

In the Aegean islands little was done in 1915. I have seen notice of only one discovery during the year, a fragmentary statue of "Eros bending the bow," of the type which is often thought to go back to an original by Lysippus. This was found in Lemnos by French soldiers on the site called Palaïopolis, which represents the ancient town of Hephaestia. It may be worth noting, however, that there is some evidence of activity, at least, among the Italians in Rhodes and the neighboring islands. On November 23, 1914, there was published a decree, signed by the "Colonel in command of the Army of Occupation," establishing at Rhodes in the Hospital of the Knights the "Reale Museo dello Spedale dei Cavalieri," for classical and mediaeval monuments of Rhodes and the islands of the Dodecanese. For the reception of the museum, the ancient Hospital of the Knights has been considerably restored. It will serve as a center for all archaeological activities in the islands occupied by the Italians during the Italo-Turkish War.

On the mainland of Greece, the most important excavations were those conducted in both spring and fall by the American School

at Corinth. Further investigation of the region where the Roman portrait statues were found in 1914 (*Classical Journal*, XI, 200) brought to light several more fragments, some of which serve to complete the figures discovered in the previous year. Even more important was the discovery, on a slight elevation near the shore of the Gulf of Corinth and close to the railway line from Corinth to Patras, of plentiful traces of prehistoric settlements. These were found by Mr. Blegen, the secretary of the school, who had general charge of the exploration of the site. Among the results are clear traces of a building of the *megaron* type and many fragments of pottery. A deep trench, sunk to hard pan, produced a regular sequence of potsherds, dating from neolithic times to the end of the Mycenaean period—a most interesting discovery in view of the general belief that the prehistoric Aegean culture had left no important traces at Corinth. One passage from Mr. Hill's report on the excavations furnishes a striking commentary on conditions in Greece:

In one aspect our work has a new character—as a recognized means of saving the poorer people of one small community from acute distress. The economic stagnation due to the European war coming before recovery had more than begun from the great strain of the two Balkan wars, together with the increase in the cost of necessities of life—due also to the European war—has made conditions very difficult throughout the country. The Excavation Fund this year comes very near being a War Relief Fund.

At Athens the Germans continued their work in the Ceramicus (*Classical Journal*, XI, 201) until the end of March, 1915. Among the interesting results were the uncovering of a considerable portion of the city wall built in 337 B.C. (cf. Aeschines *Ag. Ctesiphon* 27; Demosthenes *De Corona* 299 f.); many relics of the potteries for which the Ceramicus was famous, including potsherds of many varieties, molds, and architectural terra-cottas; a colossal marble head representing an actor in the rôle of the ἡγεμῶν θεράπων (cf. Robert, *Die Masken der neueren attischen Komödie*); a terra-cotta relief with a male portrait, of Hellenistic date; and many fourth-century terra-cotta figurines. It is planned to arrange a special Ceramicus museum, to contain a collection of typical graves and other things of value for study in connection with the excavations.

At Nicopolis, Mr. Philadelphus continued in the summer of 1915 the explorations which he began in 1913 (*Classical Journal*, X, 150), but as his attention was devoted to a Byzantine church, these excavations hardly fall within the scope of a report devoted to classical archaeology. The church contained a great number of well-preserved mosaics, which are obviously of great importance for the history of Byzantine art.

These are all the excavations in Greece of which I have seen notices of any value. The daily papers have occasionally mentioned the discovery of antiquities in the neighborhood of Salonica as a result of the occupation of that city by the Entente Allies, but I have not been able to obtain any definite information in regard to them. For most of the foreign institutions in Greece the year was clearly one of little accomplishment, at least so far as archaeological activities were concerned. With all the European nations which maintain schools in Athens involved in war, most of the younger men were engaged in some sort of government service, either as conscripts or as volunteers. The one open meeting of the Italian School is mentioned in the official *Cronaca delle Belle Arti* as if it were a most unusual event. In the French School, only the director and two Belgians were in residence. Even the American School was affected by the disturbed conditions: the series of lectures which are usually given by the directors of the foreign schools naturally were not attempted, and for the session of 1915-16 only one new student braved the dangers and discomforts of the journey to Athens.

In Italy conditions were more nearly normal. The government excavations at Pompeii and at Ostia were carried on as before, and the *Notizie degli Scavi*, which was published with the customary regularity, recorded the usual number of lesser enterprises and chance discoveries.

In Rome Commendatore Boni continued to work on the Palatine, investigating the remains of the Imperial palaces and the Republican structures under them, especially in the neighborhood of the Villa Mills, but I have seen no detailed account of the results. In Trastevere the examination of the lower levels of the Church of San Crisogono yielded, besides important mediaeval frescoes,

a large fragment of the Acts of the Arval Brothers. This dates from the year 240 A.D. and mentions for the first time the distinction between the two summits of the Aventine Hill.

The reports from Pompeii record no startling novelties. The cryptoporticus mentioned in last year's report was completely cleared; some further work was done along the Via dell' Abbondanza; and in the street which separates Regio II, Insula III, and Regio III, Insula III, the upper parts of the houses were freed of débris, preparatory to the exploration of the whole district.

At Ostia the excavation of the apartment house of which I wrote last year, and which is now officially called the Casa di Diana from a terra-cotta relief in the central court, was completed. Among the interesting details mentioned by Dr. Calza is the existence of balconies supported by vaulting on the level of the second story. These may be the *solaria Romanensia* which are suggested by an edict of the Emperor Zeno, prohibiting balconies of wood and prescribing those τῶ τῶν λεγομένων ῥωμανισίων σχήματι (cf. *Codex Theodosianus*, VIII, 10, 12, 5). In the northwest angle of this building a new *mithraeum* came to light.

In the continuation of the work along the road which has been named Via della Casa di Diana, some well-preserved shops were found. In one, a *thermopolium*, a water-basin lined with marble, proved to have as part of its lining a slab with a damaged dedicatory inscription to C. Fulvius Plautianus, the famous favorite of Septimius Severus, whose daughter, Fulvia Plautilla, became the wife of Caracalla. Besides the name of Plautianus, the slab contains the name of his son, C. Fulvius Plautius Hortensianus. As the stone has been cut in two, it is a plausible conjecture that it originally contained the name of Plautilla and served as part of a base for three statues.

The building next to the Casa di Diana has now been completely excavated. This is a large structure known as the Edificio delle Pistrine, three rooms of which were cleared about 1860. It proves to contain no less than sixteen rooms, which, with the exception of two shops of the ordinary sort, formed a double series of large *tabernae* connecting with one another. In two of these there are still several mills for grinding grain, and two others contain large

ovens, so that a considerable part of the building was occupied by a large bakery, the first to be found in Ostia, though a *corpus pistorum* is mentioned in an inscription (*C.I.L.*, XIV, 101). It is noteworthy, too, that in the fourth century after Christ a cheap sort of bread was called *panis Ostiensis*. In this building were found many bronzes, which Dr. Calza calls "certainly the most conspicuous collection that has come to light since the government excavations at Ostia were begun." The list includes two candelabra, four lamps, statuettes representing Athena, Mercury, Hercules, Priapus, a Dioscurus, and a Lar, and several small figures of animals. The narrow alley between the Casa di Diana and the Edificio delle Pistrine was found to be completely blocked by a small shrine. Figures of several divinities are still preserved on the stucco of the walls, which was renewed at least twice. All the figures seem to be copied from models of a good period, though the execution is careless and obviously of late Imperial times. The most striking is a figure of Silvanus, who was, apparently, the principal deity worshiped here.

From Syracuse, Dr. Orsi reports the continuation, in the spring of 1915, of excavations which have been carried on at intervals since 1912 near the temple of Minerva in Ortygia, familiar to all visitors as the cathedral of the modern town, with walls built up between the columns. The excavations have revealed the foundations of the pre-Deinomenid temple and other buildings, together with many fragments of architectural terra-cottas and votive offerings. Among the latter are proto-Corinthian, Corinthian, and Rhodian vases, small bronzes, and ivories; and among the architectural terra-cottas is an acroterion with a group of Medusa and Pegasus, comparable to the Gorgon of Corfù (*Classical Journal*, VIII, 133).

At Arezzo, between November, 1914, and April, 1915, about one-tenth of the Roman amphitheater was uncovered. This work is unusual, in that it was undertaken by a local association, the Società degli Amici dei Monumenti, with the help of government officials, the municipality of Arezzo, and other local bodies. The building was found to be badly ruined, as was to be expected, since it was known that in the middle of the sixteenth century the Grand

Duke Cosimo I obtained from it material for the fortifications of the town, and that later, toward the end of the eighteenth century, Bishop Marcacci again used the ruins as a quarry, but the supporters of the enterprise report that they expect to go ahead and clear the whole structure.

Among the less important events of the year, mention may be made of the discovery at Como of remains of the Roman gateway which spanned the road to Milan, and of the discovery of a large amphitheater at Pozzuoli. The latter came to light in the course of work on the new direct railway line from Rome to Naples. The building, which appears to have been buried largely by its own débris and later by a volcanic eruption of unknown date, is said to be well preserved, with fragments of painted and gilded stucco to attest its former splendor. The fact that this is the second amphitheater to be found within the limits of ancient Puteoli testifies both to the prosperity of the town and to the popularity of games and spectacles during the period of the Empire.

THE DIRECT METHOD IN TEACHING LATIN— SOME OBJECTIONS

BY M. J. RUSSELL
The Academy of Hendrix College, Conway, Arkansas

It was my privilege to attend Dr. Rouse's classes at the Columbia Summer Session of 1912 and observe his skill in teaching Latin by the direct method. He taught without the aid of a textbook and, though a born Englishman, with little English. He is a trained teacher of experience and an artist at his work. He made his subject glow with interest, and one was made to wonder that a language considered so dead could be made so alive. He spoke it freely and idiomatically. In teaching, he used everything that came to his hand. Blackboard sketches made in the presence of the class, pictures hung on the wall, cheese, balls, jokes, mistakes, interruptions—all were made to serve him.

He entered the classroom smiling and exclaimed, "*Salvete, omnes pueri et puellae,*" and immediately the response from the class came back, "*Salve, tu quoque.*" Then from the teacher, "*Septima, surge,*" and as Septima arose she said, "*Surgo,*" while her classmates with a gesture toward her said, "*Surgis,*" and the teacher with a gesture toward her said to the class, "*Surgit.*" On he went with "*Sta,*" "*Exi,*" "*Ambula,*" "*Ini,*" "*Veni,*" "*Sede,*" "*Conside,*" while the pupil always did as she was commanded and told in Latin what she was doing. Then came the plural of all these verbs, and in two lessons the class had learned the present tense of all the conjugations and several of the compounds together with several nouns, and not a word had been said about conjugations or endings. These words were reviewed every day. Some of the pronouns were added to the list of words learned, and in a few more lessons the fable of the crow and the fox was taught. Rarely had an English word been used, and then only when it was announced that English was to be spoken for a short time. When the Latin was resumed, the spell was never broken by an English word.

After hearing him for six weeks and observing the results with the class, most of those who were there left for their own schools wildly enthusiastic to try out his method. I came away thinking that our old method of teaching Latin belongs in Mr. Dooley's theory of education when he said, "It doesn't make much difference what ye teach children, so long as it is disagreeable to them." In almost every number of the *Classical Weekly* issued since then some teacher has given his experience in teaching, or rather attempting to teach, Latin by the direct method, for few seem to have succeeded. Yet I firmly believe that our Latin teaching has been improved by the experiment, and that pupils taken at the right age and taught properly will find Latin a pleasure and will read it as a literature instead of laboriously translating it into poor English.

But our conditions in Arkansas are such that I doubt very much whether we are ready to undertake the teaching of Latin by the direct method. In the first place we are not prepared as teachers. One must not only have a thorough knowledge of the language, but he must be able to speak it freely. To do this will require long practice by one who was taught by the old method. It is one thing to translate a little Latin and another to think in Latin, to speak in Latin, and to read Latin. Of course, the teacher can memorize a few questions and other sentences, but when he comes to conducting a recitation, all in Latin he will usually find himself lost long before his recitation period is over.

He must not only have a thorough knowledge of the language and be able to speak it, but he must be a trained and skilful teacher. A great many of our Latin teachers are not teaching Latin from choice. They studied some Latin in college, but prepared to teach some other subject. The opportunity they hoped for did not come, so they took positions as Latin teachers. They will doubtless do less harm the old way.

Then the textbooks prepared for teaching Latin by the direct method do not meet the needs of a teacher who has not been thoroughly trained in this method. The books can only suggest. They give the merest outline of the lesson and the teacher has to furnish the real body of the lesson. This he cannot do unless he speaks Latin freely and is prepared for any turn the lesson may take or for any surprise it may bring.

The time required by this method is an objection offered by some. We are expected to prepare our pupils for college Latin in three years. By the direct method the very best we can hope for is to have them ready for Caesar in this time. It is true that if they are well taught by the direct method they will read Caesar, Cicero, and Vergil in one year, but this is the year they are expected to be in college. If we succeed at all, we cannot wait until the pupil enters high school to begin his Latin. I am sure that whatever method we pursue we will have better success if we begin Latin with pupils when they are between the ages of ten and fifteen years and I am sure also that we shall fail with the direct method with pupils older than this. I state this from experience, after attempting this method with pupils of mature age who had never had any language except English.

Another objection that is offered to this method is the vocabulary. The Latin read in college and out of college is classic, while the vocabulary used in teaching the direct method must be commonplace and colloquial. "Why waste time," the critic says, "with these words which we shall not need in our Latin reading?"

Another unfavorable condition for this method is the fact that so many of our teachers remain in the same school for a short time only. No teacher can hope to succeed with the direct method without at least four years of consecutive work in the same school.

While these objections and others may be offered as reasons why we cannot yet succeed with the direct method, I believe we can use the suggestions that have come to us from this method to improve our work in teaching Latin. We can brighten our lessons with a little conversation in Latin, throwing into it the zest, naturalness, and expression that go with conversation in any other language; we can use oral lessons occasionally; we can, perhaps, after much patience, perseverance, and time, get our pupils to think a little in Latin and to read Latin instead of translating it. If we begin now in this way, it may be that after another generation or two of Latin pupils have gone into our schools as teachers they may be able to use this method successfully.

GRAMMAR UP TO DATE¹

BY OLIVE M. SUTHERLAND
Northwestern High School, Detroit

The wording of the subject of this paper is indeed ambiguous, for by "grammar up to date" you may understand a method of teaching syntax ultra-novel and modern, quite modish, in fact, while, on the other hand, it may be interpreted as a thoroughly logical method intimately correlated day by day with the reading done in class and, consequently, actually and literally "up to date." Whether, then, you wish to put the first interpretation upon the wording of my text and call the scheme I am going to tell you about "a fad and a whim," or whether you are more charitable and choose to look upon it with me as a certain step in the upward climb toward saner Latin teaching, I beg of you, suspend ultimate judgment until you have tested the theory to see if it works.

Last year I had the pleasure of reviewing Professor Bezard's *Comme apprendre Latin à nos fils*, and mentioned in brief a syntactical notebook which he calls one of the "tools of labor" in the successful Latin class. Since that time Professor Bezard has generously sent me through the kindness of Professor Kelsey a copy of such a notebook. It is this notebook whose use I have been asked to explain to you in greater detail.

The notebook itself has been edited by Remy Géant, one of the assistants of Professor Bezard, and contains a very systematic arrangement of all the principles of Latin syntax. These are printed in tabulated form, each followed by a few illustrations, brief and to the point, on the alternate pages of the notebook. Opposite each printed page is a blank one reserved for illustrations taken from the pupil's daily reading. Of course, all the Latin sentences, both those on the printed pages and those culled from the daily reading, are carefully and accurately translated into the mother tongue and must be learned by heart.

¹ Read at the Michigan Classical Conference, March 29, 1916.

Now a few words about the general arrangement of the book. It is as a whole divided into four main divisions: Part I dealing with the different parts of speech, Part II with the elements of the clause, Part III with the elements of the sentence, and Part IV with indirect discourse, while at the end of the book there are several blank sheets reserved for idioms not provided for elsewhere.

A brief survey of Part II will serve to give some idea of the conciseness of the arrangement. The whole framework of the clause is shown to depend upon two primary principles, that of agreement and that of the complementary relationship. A condensed form of the outline is as follows:

- I. Agreement of words
 - 1. Appositive
 - 2. Adjective
 - 3. Relative pronoun
- II. Subject
 - 1. Subject in the nominative case
 - 2. Subject in the accusative case
 - 3. Infinitive as subject
 - 4. Agreement of subject and predicate
- III. Attribute
 - 1. Attribute of subject
 - 2. Attribute of object
 - 3. Equivalents of attribute
 - a) Genitive in predicate
 - b) Ablative of quality
- IV. Complement of noun
 - 1. Limiting genitive and equivalents
 - 2. Genitive of material and equivalents
 - 3. Genitive of quality
 - 4. Partitive genitive
- V. Complement of pronoun
 - 1. Genitive, *Illud Socratis*
 - 2. Partitive genitive, *Quis vestrum?*
 - 3. Complement of neuter pronoun, *Quid novi?*
- VI. Complement of adjective
 - 1. Genitive
 - 2. Greek accusative
 - 3. Dative
 - 4. Ablative

- 5. Genitive or ablative
- 6. Supine
- VII. Complement of comparative and superlative
- VIII. Complement of adverb
- IX. Complement of interjection
 - 1. Accusative
 - 2. Dative
- X. Complement of verb

Under X are grouped, of course, the large number of infinitive and subjunctive constructions which puzzle and confuse the ordinary high-school student.

The first impression one gains from the book as a whole is its simplicity. There is not a rule, stated as such, anywhere between its two covers, but everywhere example after example proving those principles which make it possible for rules to be made.

The second excellency noted after a more careful study of this outline of syntax is its completeness and its conciseness. If it is possible to obtain anywhere a comprehensive view, literally speaking, of language structure as a whole, one surely can have it here by merely letting the eye travel over the left-hand pages of this notebook. If this, then, were the only use such a book might afford, would it not be of inestimable value in teaching our pupils that grammar is not the mere mechanical scheme they often understand it to be, but the natural and necessary framework underlying all coherent thought and withal a thoroughly sane and logical process of relating ideas, one to the other?

The third, but by no means the least, value of the book lies in the fact that the pupil, in learning by heart sentence after sentence in Latin, with its accompanying translation, chosen from the text which he is reading, and illustrating some particular principle of syntax, is gaining more real knowledge of the Latin language than he would be by writing a weekly "prose" paper in which the point of emphasis is, say, the gerund and its uses, only one example of which he has come across in his entire week's reading.

I greatly regret that this book by Mr. Géant, since it is written in French, cannot be used as it is in a classroom of English-speaking pupils. Until the time comes, however, when we may be so fortu-

nate as to obtain an English translation of the book, I am of the opinion that much can be accomplished through an adaptation of some of its most salient features.

We cannot, I believe, be too particular in insisting upon that accurate and intelligent knowledge of syntax which is absolutely essential to an appreciative and accurate translation of any passage of classical Latin. We have retained the time-old custom of writing Latin "prose" because we thought it would bring about this result, yet many of us are finding it extremely disappointing in this respect. It is in connection, then, with this "knotty" problem of "prose" composition that I am hoping to find Mr. Géant's book a valuable auxiliary.

My plan is as yet in such a formative stage that I hesitate to speak of it at all until from my rather vague, but, I hope, growing ideas some sort of satisfactory system has been evolved. Yet I may say that we have in our Caesar class tried as much as possible to make of our composition book a substitute for Géant's notebook by pasting in blank pages after the various prose lessons. On these, typical sentences from the text in Caesar have been written and later learned together with their translations. Furthermore, because there is surely that finer appreciation of a language which he only can obtain who has tried to make that language a medium for the expression of real thought, original compositions in Latin have been assigned instead of the sentences in the composition book. Let us hope that the boy who was laughed at for calling the lunchroom of the school the *locus edens* has a better idea of the difference between "eating" as a present active participle and as a verbal noun than if he had written two "prose" papers one week apart, in the first of which, judging from the introductory references, he knew he must translate all "ing" forms with the gerund, and in the second with active participles.

We are indeed grateful for the inspiration and help which has come to us from our fellow-teachers in another land, and with them would work out, as far as in us lies, the solution of these vital problems, progressing day by day, discarding, if need be, yesterday's plan and formulating in the clearer light of today's experience tomorrow's scheme.

Current Events

[Edited by Clarence W. Gleason, Roxbury Latin School, Boston, Mass., for the territory covered by the Association of New England and the Atlantic States; Daniel W. Lothman, East High School, Cleveland, Ohio, for the Middle States, west to the Mississippi River; Walter Miller, University of Missouri, Columbia, Mo., for the Southern States; and by Frederick C. Eastman, the University of Iowa, Iowa City, Iowa, for the territory of the Association west of the Mississippi, exclusive of Louisiana and Texas. News from the Pacific Coast may be sent to Miss Juliann A. Roller, Franklin High School, Portland, Ore., and to Miss Bertha Green, Hollywood High School, Los Angeles, Cal. This department will present everything that is properly news—occurrences from month to month, meetings, changes in faculties, performances of various kinds, etc. All news items should be sent to the associate editors named above.]

Florida

The State College for Women.—On Friday evening, May 19, the *Cena Romana*, the "Roman Banquet," was held at the Florida State College for Women. It was given under the auspices of the Classical Association, and by the plan and supervision of Dr. J. B. Game, professor of Greek and Latin. All the invitations, the program, the play, songs, and toasts were carried out in Latin. The decorations, too, were all in Greek and Roman fashion. Representatives of many famous Romans were there—Caesar, Vergilius, Maecenas, Horatius, Cicero, Cato, Tacitus, Catullus, Ovidius, Plinius Major, and Gallus, besides 164 *hospites*, their friends.

Indiana

Wabash College.—The personnel of the classical departments in Wabash College, Crawfordsville, Indiana, is entirely new this year. In June Professor Hugh MacMaster Kingery, for over twenty years occupant of the chair of Latin, resigned on account of the handicap of increasing deafness. Dr. Frank Hewitt Cowles of Wooster College, Ohio, was called to succeed Professor Kingery.

Shortly before Wabash opened in September the college community was surprised by the unexpected resignation of Professor Daniel Dickey Hains of the department of Greek. Professor Charles Henry Oldfather, of Hanover College, Indiana, was called to succeed Professor Hains.

LaGrange.—Miss Lena Foote, head of the Latin department of the LaGrange High School, writes:

On October 6, the closing day of the La Grange County Corn School, the annual parade of the rural and city schools of the county took the form of a pageant presenting a century of the history of Indiana, with more than fifty floats. The LaGrange school presented "the modern school system," one feature of which was a Latin float with the following characters in costume: a Roman lady and her maid, a soldier in

armor, a consul, and a lictor, while the boy who drove was costumed as a Roman charioteer.

We were both surprised and gratified to find in this week's local paper, among a few "Snapshots of Corn School," a cut with the following explanation: "The Latin Car, a classic tableau that our engraving hardly does justice to," while in an article describing the entire parade, mention is again made of the Latin float among "four tableaux of remarkable excellence."

In commemoration of Virgil's birthday the Senior Latin class will present a brief program this week for morning exercises before the assembled high school. The following subjects will be presented as three-minute discussions, informally and without notes: (1) Biography of Virgil; (2) Epic Poetry and the *Aeneid*; (3) The Story of the *Aeneid*; (4) Mythology in the *Aeneid*; (5) Metrical Reading of Hexameter Verse; (6) Translated Selections from Book I of the *Aeneid*; (7) Written Scansion, illustrated on the black-board in connection with topic 5. As a closing number the class of sixteen students will gather about the piano and sing "Arma Virumque Cano."

Iowa

Penn College.—At the suggestion of Professor William E. Berry, of Penn College, the Senior class of that institution presented the *Iphigenia in Tauris* on the evening of June 6 to a good-sized audience. Costumes and stage setting were made by the class. The translation and music were those prepared and used by Professor Weller, who also kindly assisted in drilling the class. The play was a great success. Open words of praise were heard on every hand. The audience was held in rapt attention and was greatly moved. This was the third play at Penn. In 1906 scenes from the same play were given. In May, 1909, the *Frogs* of Aristophanes was presented from the translation of Professor Berry.

Mississippi

The Mississippi Classical Association met in Jackson on May 5 with the largest attendance in its history. A lively round-table discussion gave ample evidence that the teachers of the state are making a valiant fight for the classics. The Latin charts, prepared under the direction of Miss Anne Phillips of the Laurel High School, attracted much favorable attention and did good work for the cause. Mr. J. T. Calhoun, who for a number of years has been prominently connected with the movement for vocational education in Mississippi, spoke in defense of Latin as a vocational study. In a paper entitled, "Shall Latin Have a Place in the Agricultural High School?" Miss Mabel Martin gave extracts from letters received from eminent educators interested chiefly in agriculture, testifying to the high value placed by them on the study of Latin. Among those quoted were the names of Professor Davenport, of the University of Illinois, and Dr. Bailey, of Cornell University. Miss Paslay spoke on the direct method, with a report of the demonstrations of Dr. Rouse at Columbia University. Other papers presented were: "Some Roman School Masters," by Professor Bondurant, of the University of Mississippi; "Language as a Science," by Professor Key of Millsaps College; "Latin as a Preparation for

the Romance Languages," by Professor Longest of the University of Mississippi; "The Necessity of a Knowledge of Latin in Studying Law," by Mr. Alexander, of the Jackson bar.

The following officers were elected for the year 1916-17: President, C. F. Capps, of West Point; Vice-President, Miss Anne Phillips, of Laurel; Secretary, Miss Susie Smylie, of Hattiesburg.

Nebraska

Omaha.—Miss Susan Paxson, of the Central High School, reports: "We have fifteen large beginning classes in Latin in our high school, the largest number in fifteen years. Would that we could keep them all through Vergil!"

New York

Chautauqua.—For the last two years Sophocles' *Electra* and *Antigone* have been presented at the Chautauqua summer school under the direction of Dr. R. H. Tanner, professor of Latin and Greek in the Illinois College, Jacksonville, Illinois. The leading parts were taken this year by six Illinois College students who spent six weeks with Dr. Tanner at Chautauqua. The minor parts and the chorus were secured and trained at Chautauqua. Some six or seven thousand people witnessed the performances in the amphitheater, and the plays were very well received. Hundreds who could not obtain seats stood through the entire performances. The *Antigone* was given on July 29 and the *Electra* on August 17.

North Dakota

The University of North Dakota.—The departments of Greek and Latin at the University of North Dakota have been combined and reorganized under the title, "Department of Classical Languages and Literatures." This action was taken after the death of Professor Perrot, who up to the time of his death last May had occupied the chair of Latin for nearly twenty-five years. Professor G. E. Hult, who has served as professor of the Greek language and literature for the past eight years, was made head of the department, and Dr. Fred Smith of the University of Chicago was appointed as instructor.

This reorganization conforms to the changed conditions of classical education in most American colleges and universities. It is designed to offer wider opportunities to students whose main interest is in literature rather than in philology or language. The prospects of the classics at North Dakota are particularly encouraging because of the hearty co-operation of the English department, which offers major credit for courses in classical literature.

Ohio

Toledo.—The Senior Latin Society of the Scott High School, Toledo, Ohio, had for its first meeting of the season 1916-17 an illustrated lecture on Sicily by Professor Louis E. Lord, of Oberlin College.

This meeting was a tribute to Virgil, particularly so because of the fact that the poet's birthday falls on the Ides of October. Among the visitors

at the meeting for whom seats had been reserved were many Oberlin alumni. Professor Lord has visited Sicily on several occasions and has a fine collection of slides. In his usual happy way he introduced the young Aeneadae to ancient history and archaeology, entertaining them at the same time with personal experiences full of humor. It was a most auspicious occasion. The first consul of the Society, Stanley Friedman, introduced the lecturer in a most charming manner.

The Society's collection of Virgilian and Pompeian slides was shown by the "two consuls" at the Latin section of the Northwestern Ohio Teachers' Association.

Warren.—Presenting Latin plays for the first time in the history of Warren High School, the pupils of Miss Virginia Reid's Cicero and Virgil classes last night delighted a large-sized audience in the high-school assembly room.

The first, *A School Boy's Dream*, was enacted entirely by two characters. Jerome Hurlburt, as the school boy, fell asleep and saw in dreaming the ghost of Julius Caesar, portrayed by Harold Haine.

The longer playlet was that entitled *A Roman School*. In this a schoolroom was the setting, the teachers, Lillian Stevens and Catherine Miller, presiding over the decorum of the room while the judges of the oratorical contests, Harold Noble, William Gillen, and Frances Ott listened to the orations of the various pupils in the class. The pupils played Roman games, sang, and recited in splendid manner, while their Roman costumes added considerably to the effect.

Wisconsin

This year's contest of the Latin League of Wisconsin Colleges was held at Madison, Wisconsin, but the examination test was set by Professor H. J. Barton and his committee of the University of Illinois. The Louis G. Kirchner Latin Memorial Prize of \$250 was won by Miss Cora Smith of Ripon College. In the four competitions thus far held for this prize the winners have been students of Milwaukee-Downer College, Lawrence College, Carroll College, and Ripon College, respectively. The trophy cup for the college whose team as a whole made the best showing went to Ripon College, for the second time. For the first two competitions the cup was won by Lawrence College. The silver medal went to Miss Dortha Bamford of Beloit College, the bronze medal to Mr. John Frayne of Ripon College.

Some Recent Faculty Changes

Roy C. Flickinger, associate professor of Greek in Northwestern University, has been promoted to be professor of Greek and Latin.

R. V. D. Magoffin, of Johns Hopkins University, has been promoted to an associate professorship of Greek and Roman history in that institution.

Charles C. Mierow, formerly of Princeton University, has been appointed professor of classical language and literature in Colorado College.

J. M. Gordon, until recently professor of Latin in Trinity University, Texas, has been elected president of the East Central State Normal School of Oklahoma.

General Comment

[Edited by Gilbert Campbell Scoggin, of the University of Missouri.]

In the *Yale Review* for October appears an article on "The Case of Latin" by Dr. A. G. Keller, a professor of the science of society. Professor Keller takes issue with most of the arguments usually offered in favor of Latin. Insisting that the ordinary student learns really very little of the language, he doubts whether the aesthetic value thus derived can be great or worth the cost, although it is usually the aesthetic value that is in the minds of those who express fear that Latin is endangered. He also doubts that much training in the use of good English comes from the study of Latin grammar. He rightly rates Greek far above Latin from the aesthetic point of view: "It is a personal conviction, but I do not doubt that many would agree with it, that most of the aesthetic value peculiar to the classics in the original disappeared when Greek declined; I think the case of Greek was decided with too little realization of the truth inhering in that conviction." He is of the opinion that, with a few exceptions, such as Horace and Catullus, the Latin authors can be more successfully translated than can the Greek. Throughout he evinces a low estimate of Latin literature and insists that it would be better for Greek alone to be maintained rather than Latin alone. Yet, if Greek is to go, Latin wholly apart from its aesthetic side must be maintained because of its value as discipline. The teaching of Latin has been systematized, and Latin has better elementary teachers than do the modern languages. Latin should be kept until a satisfactory substitute is offered. In the rôle of discipline Latin is quite worth the cost.

In the same number of the *Yale Review*, Professor Thomas Dwight Goodell writes on "Greek in the New University." Believing as he does that the old structure of classical education is falling, he still derives some hope from the marked indications of idealism which frequently appear in our mixed population. Amid all the eager scramble for wealth, there is seen on the part of those who have quickly acquired wealth the desire to endow museums, to found libraries, to make collections of Greek art, books, painting, and the like. In the end all men turn toward those things which satisfy the spirit. If I understand his theory aright, Professor Goodell thinks that a baneful influence was exerted on classical studies at an earlier period by comparative philology and even by classical archaeology; but that since these studies now are assuming more independent positions as special fields to be mastered by a few, classical studies have somewhat recovered. I must confess that my own view has long been the opposite of this. I think that the good old study of humanity

has been allowed gradually to suffer disintegration with subsequent loss to all concerned. Many things formerly included in classical study have now either proclaimed their independence or have been annexed by some aggressive neighbor. Thus in our colleges we have lost ancient history; and even such an important field as Greek philosophy must be sought outside the classical group. No wonder is it that some outsiders regard the classics as of no value. These critics have in mind only the dry husk of language, which is about the only thing now left us uncontested, and they associate all the vital content with what to them seem to be more living subjects. Professor Goodell rightly insists that in the college we should try to instil a love for letters, and that we should leave to the graduate school the making of teachers and philologists. He believes that the relations between Greek and Latin are now too dependent, and that the Hellenists should maintain their own position separate: "It is Greek art and letters that constitute the foundation and the crown of classical study for liberal culture. Greek teachers must give to it all their powers in college." He thinks that Greek will be learned by few as always, but will be better learned, and that, too, by the leading minds.

On October 6 Mr. Ernest Martin Hopkins was installed as eleventh president of Dartmouth College. In his inaugural address President Hopkins outlined his conception of the purpose of a college together with his views as to how the proper end might be attained. The sane views which he expressed will for the most part meet the unqualified approval of the humanists. In general, he insists that in the college there should be fewer subjects and these should be better taught. He sounds a warning against the present widespread demand for subjects strictly utilitarian. He wisely draws the distinction between a college and a technical school, at the same time pointing out the great debt that the college owes to the latter. We need schools of both types; the modern world demands superior technical training, while the old cultural college has always proved its usefulness in our national history. The vital connection of the present with the past is emphasized: "It is not likely to be, at any time, that without loss to itself, the world can close its mind to the influence of the past. The intuitions for the beautiful and the understanding for the logical which have come down to us from civilizations which have risen and lived their allotted lives are foundations for the appreciation of philosophy, art, and literature without which the world would lose its breadth and depth." He cites with approval from the *Memorandum on the Limitations of Scientific Education*, issued by Mr. James Bryce and other distinguished English scholars, the statement that in education "we believe that the study of Greece and Rome must always have a large part, because our whole civilization is rooted in the history of these peoples, and without knowledge of them cannot be properly understood." Like George Grote, he champions the classics, not through hostility to science—every humanist craves knowledge from all sources—but

because in the present materialistic age the humanities will be attacked, while science will always be able to take care of itself. The point is well made that the caprice of the student in the matter of courses to be taken should be restrained and guided "by what past experience has shown to be best for the ultimate accomplishment of those ends for which the college exists as a means. But the requirements cannot be abolished even if he remains unconvinced, for the college is more responsible for his ultimate satisfaction than for his immediate contentment." Other points stressed by President Hopkins are the duties of the graduate to the state, the value of discipline, the dangers of excessive individualism, and the building of character.

It is a striking paradox that so many eminently successful men should have found fault with their teachers and their early studies. Petrarch, urged to the study of law by his father, afterward maintained that the time spent on his legal studies at Montpellier, and later at Bologna, was wholly lost. Yet it is hard to remove a lurking suspicion that some legal seeds must have yielded a rich harvest in the mind of a man who felt such admiration for Cicero, the greatest of the lawyers of ancient Rome. Charles Darwin studied for seven years at Shrewsbury under one of the greatest of schoolmasters, Dr. Samuel Butler, yet in his autobiography Darwin asserts that "the school as a means of education to me was simply a blank." But we begin to doubt this sweeping statement when immediately afterward we are told that much attention was given to committing lessons to memory and that in this he could display considerable facility. Ability to learn by heart in a few minutes forty or fifty lines of Virgil or Homer, a task admittedly disagreeable to him, does not sound like failure to us. When he tells us further that he came to admire Horace, and that he left the school with strong and diversified tastes, and that he went up to Cambridge possessing a keen pleasure in understanding anything that was difficult and complex, we are truly amazed, and wonder what other purpose a school should serve. It was only after long years of restricted scientific study that his powers of aesthetic enjoyment were allowed to atrophy, and then he was wise enough to regret the loss of his old relish for poetry and music. His early humanistic training could not stifle his love for natural science; but when given free rein, science, mind you, did throttle his aesthetic powers, and that, too, to his lasting sorrow. The distinguished French naturalist, M. Fabre, has sprinkled among his delightful studies of insect life some very interesting comments on his early education. Unlike many others, he now speaks gratefully of those who gave him a thorough drubbing in Greek and Latin. He admits that he fumed against the system at the time, but adds that today he is wiser through age and experience. His one regret now is that his literary studies were not more prolonged. He even confesses that later in life he has often returned to the old books against which his youthful impatience had fretted. John Stuart Mill, while studying Latin under his father, was set to

teaching his younger sister in the same subject. It was a very disagreeable task at the time, yet with uncommon generosity he admits that from this discipline he derived incalculable benefit from the necessity of learning more thoroughly and of retaining more lastingly. The thorough drilling that Mill received from his father might well have made even his vigorous intellect shrink, but the result only goes to prove the value of stern discipline in tasks not wholly congenial. Such treatment at the hands of a public schoolmaster might have called forth some protest from Mill. Of recent expressions of dissatisfaction with early masters and schooling, none is more whimsical than that found in the *Autobiography* of Charles Francis Adams. Adams got started wrong by being born in Boston, and things were made worse by his being sent for his early education to the Boston Latin School. A gloomy picture indeed one gets of this ancient school. Mr. Dixwell, the head master of his day, would seem to have been the incarnation of inefficiency—or can it be of stern efficiency which might well not please a strong-willed boy determined to have his own way in his own education? At any rate, proof of Mr. Dixwell's literary tastes and scholarship may be found in a little volume which late in life he issued privately "for friends." This book, entitled *Otia Senectutis*, consists of Greek and Latin renderings of various bits of favorite verse, here brought together at the repeated request of an old pupil! This pupil, who had now become a distinguished scholar and teacher, never lost an opportunity of acknowledging his indebtedness to Mr. Dixwell, who had made his career possible. After Adams had left such a school, there would seem to have been only one greater possible calamity, and, of course, fate brought this upon him, that he should be sent to Harvard College. Here he might have become a Greek scholar, but it fell to his lot to have as his teachers, Professors Cornelius Conway Felton, and Evangelinus Apostolides Sophocles. Now in spite (?) of these teachers, Adams became interested in Greek literature; he read much Greek on the outside and reached the point where he could read a hundred lines of Homer an hour! "A little more and I should have acquired the faculty of reading Greek as a living language," he exclaims; and at this point the reader, recalling that Sophocles was a native Greek, may shrewdly suspect that his teaching may have reflected his own feeling for living Greek. But the methods of instruction in use destroyed all incentive toward learning Greek, says Adams, and "to my lasting and subsequent regret, the half-acquired faculty fell into disuse," presumably after he had got far beyond the reach of that stern pair of taskmasters, Professors Felton and Sophocles. The hostility toward the classics later displayed by Adams when he was a member of the Board of Overseers of Harvard has been mentioned in these columns, as well as his recantation shortly before his death. At the end of a busy and useful life he seems to have realized that much of his own success had come as the result of those classical studies which he had long ago pursued under the humanists.

Recent Books

Foreign books in this list may be obtained of Lemcke & Buechner, 30-32 West 27th St., New York City; G. E. Stechert & Co., 151-55 West 25th St., New York City; F. C. Stechert Co., 29-35 West 32d St., New York City.

- ALLISON, F. G., and ALLISON, ANNE C. *The Aeneid of Vergil*. Conington's English translation revised. (Lake English Classics.) Chicago: Scott, Foresman & Co. 16mo, pp. 452. \$0.40.
- DEAN, L. R., and DEFERRARI, R. J. *Selections from the Roman Historians*. Boston: Allyn & Bacon. Pp. xii+259. \$1.50.
- GAME, J. B. *Teaching High-School Latin*. Chicago: The University of Chicago Press. Pp. ix+125. \$1.00 net.
- KELLER, W. J. *Goethe's Estimate of the Greek and Latin Writers*. (Doctor's dissertation.) Madison, Wis. Pp. 191. \$0.40.
- MOONEY, J. J. *The Minor Poems of Vergil*. A metrical translation. Cornish Brothers. Cr. 8vo, pp. 117. 3s. 6d. net.
- MOORE, C. H. *The Religious Thought of the Greeks, from Homer to the Triumph of Christianity*. Cambridge: Harvard University Press. Pp. vii+385. \$2.00.
- TAYLOR, H. *Cicero: A Sketch of His Life and Works*. Chicago: McClurg. Pp. 45+615. \$3.50.
- TREVER, A. A. *A History of Greek Economic Thought*. (Doctor's dissertation.) Chicago: The University of Chicago Press. Pp. 162. \$0.75 net.
- WEIR, M. C. *The Prometheus Bound of Aeschylus*. A translation. New York: Century Co. Pp. 77. \$0.60.